# Illiana Expressway and Freight Corridor

Corridors of the Future Program - Phase 2 Application







Submitted by:

The Indiana Department of Transportation
The Illinois Department of Transportation
The Northwestern Indiana Regional Planning Commission
The Chicago Metropolitan Agency for Planning

May 25, 2007











#### INDIANA DEPARTMENT OF TRANSPORTATION

#### Driving Indiana's Economic Growth

100 North Senate Avenue Room N758 Indianapolis, Indiana 46204-2216 (317) 232-5525 FAX: (317) 232-0238

Mitchell E. Daniels, Jr., Governor Karl B. Browning, Commissioner

May 24, 2007

Mr. James D. Ray Chief Counsel Federal Highway Administration 400 Seventh Street, SW, Room 4213 Washington, D.C. 20590

Re:

Corridors of the Future Phase 2 Application Illiana Expressway and Freight Corridor

Dear Mr. Ray:

I am pleased to submit for your consideration the enclosed Phase 2 Corridors of the Future Application for the Illiana Expressway and Freight Corridor on behalf of the Indiana Department of Transportation (INDOT), in conjunction with the Illinois Department of Transportation (IDOT), the Northwestern Indiana Regional Planning Commission (NIRPC), and the Chicago Metropolitan Agency for Planning (CMAP). Through this application, we have demonstrated the need for this project in terms of alleviating congestion and enhancing safety on existing bi-state roadways, as well as providing opportunities for commerce and economic development at both the regional and national levels.

Support for the Illiana Expressway and Freight Corridor project is widespread, crossing municipal, county and state boundaries. In addition to being supported by the four sponsoring agencies, the project has received a host of additional endorsements which are included in the letters of support provided in Appendix A. The States of Indiana and Illinois have confirmed their commitment to the project by entering into a Bi-State Agreement to study the corridor's potential for enhancing the safety and flow of traffic both within and through the bi-state region. Most recently, Indiana Governor Mitch Daniels signed into law Senate Bill 105 which enables INDOT to perform a feasibility study of the proposed corridor.

The project sponsors appreciate the advancement of the Illiana Expressway and Freight Corridor project into the Phase 2 competition. Your consideration of this project for further development in the Corridors of the Future Program will be sincerely appreciated.

Respectfully,

Karl B. Browning Commissioner,

Indiana Department of Transportation

www.in.gov/dot/
An Equal Opportunity Employer

### Illiana Expressway and Freight Corridor Corridors of the Future Program – Phase 2 Application

*Submitted by:* 

The Indiana Department of Transportation
The Illinois Department of Transportation
The Northwestern Indiana Regional Planning Commission
The Chicago Metropolitan Agency for Planning

### **Table of Contents**

1.0	Introduction	1-1
2.0	Physical Description of the Proposed Illiana Corridor	2-1
	2.1 Linkages to Existing Transportation Facilities	2-4
	2.2 Proposed Transportation Improvements with Linkages	
	to the Illiana Corridor	2-5
	2.3 Study Area Environmental Features	2-7
3.0	Consistency with Local and Regional Planning	3-1
4.0	Congestion Reduction/Mobility Benefits	4-1
	4.1 Lake County Impacts	4-4
5.0	Economic Benefits and Support of Commerce	5-1
	5.1 Economic and Demographic Profile of the Illiana Corridor	5-1
	5.2 Economic and Travel Benefits of the Illiana Corridor	5-6
6.0	Freight Mobility	6-1
	6.1 Conclusion	6-8
7.0	Safety Analysis	7-1
	7.1 Safety Trends	7-1
	7.2 Number of Crashes	7-1
	7.3 Crash Rates	7-8
8.0	Finance Plan, Project Delivery, and Private Sector Participation	8-1
	8.1 Publicly Financed Freeways in Both States	8-1
	8.2 Illinois Tollway Extension in Illinois, Publicly Financed Toll Road	
	in Indiana	8-2
	8.3 P3 Toll Road in Both States	8-3
9.0	Exceptional Environmental Stewardship	9-1
10.0	Proposed Project Timeline	10-1
	10.1 Project Development	10-1
	10.2 Corridor Protection	10-2
	10.3 Right-of-Way Acquisition	10-2
	10.4 Construction	10-2
	10.5 Summary	10-3

## Table of Contents (continued)

11.0 Opportunities Resulting from Corridors of the Future Designation	11-1
12.0 A Clear Path for Success	12-1
Appendix A Support Letters	

### **List of Tables**

4.1	Daily VMT for Illinois and Indiana	4-4
4.2	Total Daily Regional VMT for Build and No Build	4-5
5.1	Annual Employment Growth	<b>5-</b> 3
5.2	Industry Employment Share by Industry Sector for 2004	5-4
5.3	Number of Jobs for the Manufacturing, Retail Trade, and the Transportation and Warehousing Industries for 2004	5-6
5.4	Regional Economic Impacts in 2030	5-8
5.5	Regional Economic Impacts in 2020, 2030, and 2040	5-8
6.1	Growth in Freight Traffic for the Chicago Region and the United States	6-1
7.1	Motor Vehicle Crashes in Illinois Portion of Study Area	7-2
7.2	Motor Vehicle Crashes in Indiana Portion of Study Area	<b>7-</b> 5
7.3	Comparison of Percentages of Fatal Crashes Involving Trucks on Selected Study Area Roadways	7-8
7.4	Crash Rates in Illinois Portion of the Study Area	7-9
7.5	Crash Rates in Indiana Portion of the Study Area	7-9

## **List of Figures**

2.1	Conceptual Illiana Corridor	2-2
2.2	Conceptual Illiana Corridor Study Area	2-3
2.3	Four-Lane Typical Section	2-4
2.4	Eight-Lane Typical Section	2-4
2.5	Illiana Corridor Land Cover	2-9
2.6	Illiana Corridor Features	2-10
3.1	Michigan Department of Transportation I-94 Corridor	3-2
4.1	Volume/Capacity Ratios for the Chicago Region in 2002	4-2
4.2	Volume/Capacity Ratios for the Chicago Region in 2035	4-3
5.1	Employment Distribution by County	5-2
5.2	Location Quotients for Illiana Corridor	5-5
5.3	Illiana Corridor Air-Rail Transportation Infrastructure	5-10
6.1	Originations of Freight Traffic in Chicago Region by Mode	6-2
6.2	Terminations of Freight Traffic in Chicago Region by Mode	6-3
6.3	Value of Freight Traffic Terminating in the Chicago Region by Traffic Origin	6-5
6.4	Value of Freight Traffic Originating in the Chicago Region by Traffic Destination	6-6
6.5	Growth in Truck Traffic in the Chicago Region	6-7
6.6	Intermodal Facilities within a 50-Mile Radius of the Conceptual Illiana Corridor Alignment	6-8
7.1	Average Annual Total Crashes in Illinois Portion of Study Area	<b>7-</b> 3
7.2	Average Annual Fatal Crashes in Illinois Portion of Study Area	7-4
7.3	Average Annual Total Crashes in Indiana Portion of Study Area	7-6
7.4	Average Annual Fatal Crashes in Indiana Portion of Study Area	7-7
10.1	Implementation Timeframe	10-3

#### 1.0 Introduction

In response to the U.S. DOT's solicitation of applications for its Corridors of the Future Program (CFP) in September 2006, the Indiana Department of Transportation (INDOT), in cooperation with the Illinois Department of Transportation (IDOT), the Northwestern Indiana Regional Planning Commission (NIRPC), and the Chicago Metropolitan Agency for Planning (CMAP) submitted an application for the Illiana Expressway and Freight Corridor (Illiana Corridor). On February 1, 2007, the list of 14 applications (from the original 38 project submittals) was announced for advancement into the next phase of corridor competition. It was no surprise that the Illiana Corridor was included in this list of semifinalists, as this proposed project clearly addresses the objectives of the CFP, which was designed to facilitate the development of multistate transportation corridors in one or more modes. The Illiana Expressway has been a part of long-range plans for the bi-state region (under a variety of names) since the early 1900s. Although the proposed corridor has shifted southward over the years, the concept of providing a connection between the southwestern suburbs of Chicago and northwest Indiana has not changed. With the Chicago metropolitan area expanding geographically with each passing year, traffic volumes have increased significantly on alternative east-west bi-state routes, mainly I-80, I-94, I-90, and U.S. 30. Not only is this increased traffic resulting in delays to passenger vehicles, it also results in major economic impacts to industries that depend on the ability to move freight within and through the region. Development of the Illiana Corridor is, therefore, critical not only to the mobility of the region, it also will play a major role in our nation's commerce by alleviating one of the nation's most significant bottlenecks for the freight industry.

Through this Phase 2 Application for the Corridors of the Future Program, we have demonstrated an indisputable need for the Illiana Corridor, as well as a clear path for success. As mentioned above, the purpose and need for the corridor is based on congestion along existing parallel routes within the study area, which hinders both personal travel and the mobility of freight within and through the region. In addition, the high percentage of truck traffic along existing routes has resulted in higher than average crash severity rates. Because the alternatives to developing the Illiana Corridor, including capacity expansion on existing routes, are either cost-prohibitive or infeasible due to the impacts of obtaining required right-of-way, the Illiana Corridor is clearly the preferable solution to addressing the study area's needs and opportunities.

## 2.0 Physical Description of the Proposed Illiana Corridor

As shown on the map in Figure 2.1, the conceptual Illiana Corridor traverses the northern portion of Will County in Illinois and central Lake County in Indiana. The corridor shown in the figure is a three-mile-wide band extending from its western terminus at I-57 (between Monee and Peotone) in an easterly direction, skirting the northern edge of the proposed South Suburban Airport footprint. It then crosses IL 1/IL 394 in the vicinity of Goodenow Road, and continues eastward to the state line. At the state line, the corridor shifts southeastward past the south end of Cedar Lake, then turns eastward in the vicinity of Lowell. It continues eastward to its eastern terminus at I-65, between SR 2 and SR 231. The length of this conceptual corridor is approximately 25 miles. An aerial orthophoto of the study area is provided in Figure 2.2.

It is anticipated that the proposed Illiana Corridor facility would function as a four-lane limited access rural expressway, as shown in the conceptual typical cross section in Figure 2.3, with the primary purpose of serving through traffic, rather than local trips. Interchange spacing and locations have been conceptualized for the purpose of this application consistent with this purpose. The proposed interchange locations, as depicted in Figure 2.1, would include I-57 and IL1/IL 394 in Illinois; U.S. 41 and I-65 in Indiana. The limited number of interchanges also will discourage sprawl-induced land use patterns in the study area.

Due to the potential for a significant amount of truck traffic being diverted to this corridor, consideration also will be given to including two truck-only lanes in each direction, in addition to the four general purpose lanes, in the cross section. The typical cross section for this option is shown in Figure 2.4. The inclusion of exclusive truck lanes in the Illiana Corridor will enhance freight mobility within the bi-state region by providing an alternative to the existing congested routes. In addition to the freight benefits that this would provide, it also will result in more capacity on the existing routes for personal traffic, as well as enhancing the safety of all routes by separating heavy truck traffic from general traffic lanes.

Figure 2.1 Conceptual Illiana Corridor

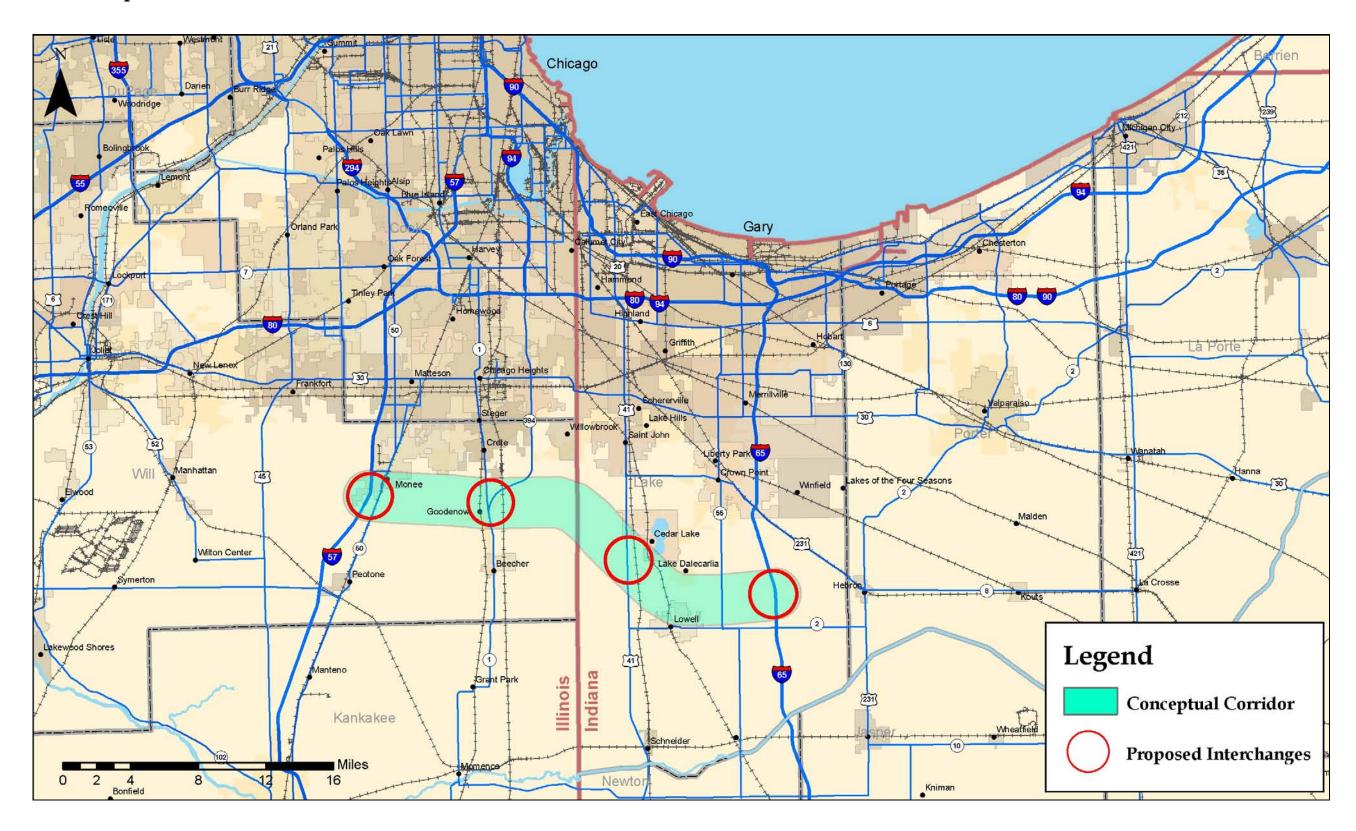


Figure 2.2 Conceptual Illiana Corridor Study Area

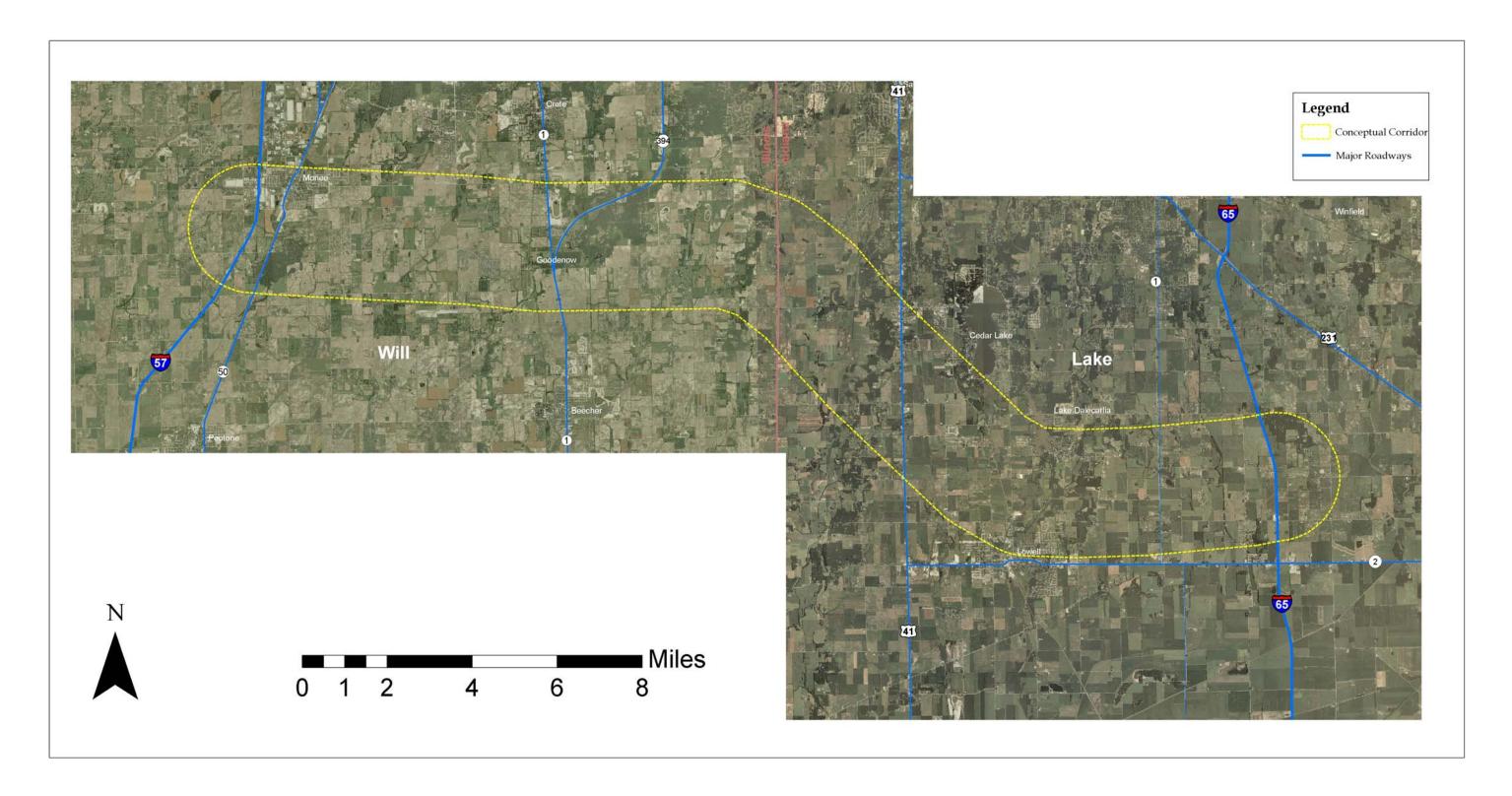


Figure 2.3 Proposed Four-Lane Typical Paved Section

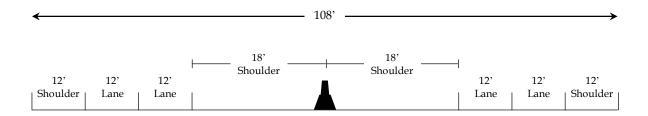
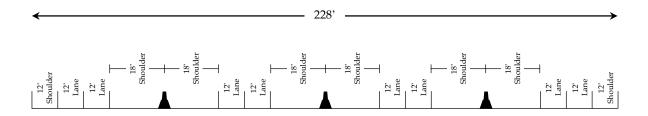


Figure 2.4 Proposed Eight-Lane Typical Paved Section



#### ■ 2.1 Linkages to Existing Transportation Facilities

The highway network within the two-county study area includes a number of major east-west interstate highways, including I-80, I-90, I-94, and I-294. As can be seen on the map in Figure 2.1, I-94 enters the study area from the east and joins with I-80 at the point where I-94 intersects the Indiana Toll Road (I-80/I-90). The I-94/I-80 pair west of this interchange is known as the Borman Expressway. This route continues westward, crossing into Illinois, until the two routes diverge, with I-94 continuing north into the City of Chicago. I-80 then joins I-294, the Tristate Tollway, and continues westward. At the point where I-94 and I-80/I-90 intersect in Indiana, I-90 continues northwestward into Illinois where it becomes the Chicago Skyway. In the north-south direction, the study area is traversed by two interstate highways, I-65 in Indiana and I-57 in Illinois. In addition, the area is traversed by two U.S. routes: U.S. 41 in the north-south direction and U.S. 30 in the east-west direction. The study area also is entwined by numerous state, county, and local routes.

In addition to the major study area roadways that intersect the proposed Illiana Corridor, the study area also is traversed by a number of freight and commuter rail lines. Freight rail lines which intersect the Illiana Corridor include the Canadian National, Norfolk Southern, CSX, and Union Pacific/CSX. The Metra Electric District Commuter Rail Line

(utilizing the trackage of the Canadian National Railroad) extends from the City of Chicago to University Park, just north of the proposed western terminus of the Illiana Corridor at I-57. This close proximity between the proposed expressway and the commuter rail line is conducive to providing a multimodal transfer facility in this area. An eight-mile extension of the Metra Electric Rail Line has been proposed to serve the proposed South Suburban Airport, as well as potential use of the rail line to provide intercity service south to Kankakee, thus expanding the multimodal opportunities.

## ■ 2.2 Proposed Transportation Improvements with Linkages to the Illiana Corridor

Described below are proposed enhancements to the existing transportation networks in the study area that will have an impact on (or be impacted by) the Illiana Corridor.

**IL 394 Enhancements –** The Illinois Department of Transportation currently has an environmental study underway for upgrading IL 394 and extending it as a limited access facility to Exchange Street in Crete. Other enhancements to IL 394 would include widening to four lanes in each direction north of Exchange and two lanes in each direction south of Exchange. The improvements would continue south to Goodenow Road, in the vicinity of a potential interchange of the Illiana Corridor with IL 1/IL 394. These enhancements to IL 394, combined with development of the Illiana Corridor, would facilitate access to numerous freight facilities within close proximity of IL 394, including the truck terminals in Chicago Heights and Sauk Village, and the proposed intermodal facility in Crete.

**I-57 at I-294 Interchange –** An environmental assessment currently is underway for construction of an additional interchange between I-57 and I-294 (Tristate Tollway). This is one of the few locations in the nation where two interstate highways cross with no interchange. This proposed interchange would facilitate access to the Illiana Corridor by enabling I-294 traffic to exit at I-57 and continue south to the interchange with the Illiana Corridor.

**I-65 at 109**<sup>th</sup> **Street Interchange –** A new interchange is slated for construction beginning in 2011 (near Crown Point). This interchange, while north of the conceptual Illiana Corridor interchange location, would enhance access from Crown Point to the Illiana Corridor, then westward into northeast Illinois.

**I-355 Extension – I-55 to I-80 –** This 12.5-mile extension of I-355 from its current terminus at I-55 to I-80 currently is under construction. This south extension of I-355 will enhance access between O'Hare, the western suburbs, and a rapidly growing portion of Will County. When completed, I-355 would be linked to the Illiana Corridor via I-80 and I-57.

**Prairie Parkway -** A Draft Environmental Impact Statement (DEIS) was recently prepared for a four-lane, access-controlled expressway between I-80 and I-88 in Grundy, Kendall,

and Kane counties, approximately four miles west of IL 47. This proposed roadway would serve growing north-south travel needs in the far western portion of the region, providing a connection to current and future jobs. A possible future extension of the Illiana Corridor to connect with I-55 in the vicinity of the Logistics Park intermodal facility near Elwood and eventually with the southern terminus of the proposed Prairie Parkway, has been discussed by various agencies within the region.

Metra Proposed Southeast Commuter Rail Service - There currently are two additional commuter rail lines that have been proposed for the study area which also would intersect the proposed Illiana Corridor. In Illinois, an Alternatives Analysis currently is underway for the Metra Southeast Commuter Rail Service which would extend from downtown Chicago, south to the Village of Crete, with a possible extension to serve the proposed South Suburban Airport. This commuter rail line, which would utilize the existing trackage of the Union Pacific and CSX Railroads, would intersect the Illiana Corridor within close proximity of the interchange at IL 1/IL 394, thus making this an ideal location for a multimodal center.

Westlake Corridor Proposed Commuter Rail Extension - On the Indiana side of the state line, one of two extensions proposed for the Chicago South Shore and South Bend Railroad (CSS&SB), operated by the Northwest Indiana Commuter Transportation District (NICTD), would tie into the existing Metra Electric District tracks in Chicago, and would extend southeastward to the Town of Lowell. The proposed extension intersects the Illiana Corridor just north of Lowell, which would provide multimodal transfer opportunities, similar to the other commuter rail services discussed above. An Alternatives Analysis currently is underway for this project, which will result in the identification of a Locally Preferred Alternative to be advanced to Preliminary Engineering and the preparation of an Environmental Assessment.

Crete Intermodal Facility – Plans currently are underway by CenterPoint Properties to locate an 850-acre intermodal yard and industrial facility in Crete, in the area bounded by Crete-Monee Road on the north, Goodenow Road on the south, and the UP/CSX Railroad tracks on the east. This development would include approximately five million square feet of industrial space. The Illiana Corridor would provide access to this facility via the interchange at IL1/IL 394.

**Additional Regional Intermodal Facilities –** Discussions currently are underway for several additional potential intermodal rail yards, both in the Illinois and Indiana portions of the study area. (Due to the confidential nature of these proposed facilities, their locations cannot be disclosed at this time.) The proposed Illiana Corridor would serve as a catalyst for developing these proposed facilities, as well as others in the region in the future.

South Suburban Airport (SSA) - A master plan has been completed for a proposed South Suburban Airport (SSA), to be located in Will County, Illinois, between Peotone and Beecher. A Tier 1 EIS was prepared for the proposed airport, with the FAA issuing a ROD in July 2002. The Illinois Department of Transportation began purchasing land surrounding the Will County Airport site in 2002. There currently are two footprints for the proposed airport: the inaugural airport and the ultimate airport. Highway access to the SSA would be via I-57 on the west and IL 1 on the east. The conceptual Illiana

Corridor skirts the northern edge of the airport footprint. The proposed SSA could be accessed by Illiana Corridor interchanges at I-57 or IL 1/IL 394. In addition to the enhanced passenger access that the Illiana Corridor would provide to the proposed SSA, freight mobility also would benefit significantly. Because this subregion (Will and Lake counties) serves as a "freight hub within the Chicago freight hub," air freight and related multimodal opportunities afforded by the proposed airport would be enhanced by the presence of the Illiana Corridor.

#### ■ 2.3 Study Area Environmental Features

The following sections outline key environmental features in the Illiana Corridor study area, including land cover, managed lands, wetlands, floodplains and watersheds, historic structures, and endangered species. These features will be addressed in future phases of the project.

#### **Land Cover**

The land cover within the footprint of the Illiana Corridor, as shown in Figure 2.5 (National Land Cover Database from 2001), is dominated by agricultural uses. It should be noted, however, that low-density development in the region continues to displace agricultural lands, particularly in the northern portion of the Corridor.

A review of the area surrounding the Corridor shows cultivated crops to be the dominant land use. Over half of the land is used for cultivating crops or as pasture or hay fields. Low-intensity development covers a portion of the corridor, primarily clustered around the communities of Monee and Goodenow in Illinois and Cedar Lake, Lake Dalecarlia, and Lowell in Indiana. Patches of deciduous forest also are prevalent as a land cover.

#### **Managed Lands**

There are several managed lands that fall within the conceptual Illiana Corridor, as shown in Figure 2.6. These lands typically represent valuable natural resources that have been identified and selected for protection. Within the corridor, managed lands are heavily concentrated near waterways. Several greenways follow the path of a river or creek and lakes are frequently surrounded by protected areas.

At the western end of the corridor, along IL 50, lies the Raccoon Grove County Forest Preserve. Raccoon Grove is a 210-acre dedicated Illinois Forest Preserve that was established in 1937. It is centered on Rock Creek. On the western side of IL 50 lies the connected Monee Reservoir, a 195-acre preserve which features a 46-acre lake. It was established in 1988.

A series of managed lands following the Plum Creek Greenway intersects the proposed corridor slightly to the east of IL 394. The southern portion of the Greenway which falls within the corridor includes the County Forest Preserves of Goodenow Grove, Middle Plum Creek, and Plum Grove. Goodenow Grove is 780 acres and was established in 1938. Five hundred forty-one acres were dedicated as an Illinois Forest Preserve in 1996. The Middle Plum Creek and Plum Grove Forest Preserves encompass approximately 440 and 100 acres, respectively.

The only managed land area in Indiana within the conceptual corridor is the German Methodist Cemetery Nature Preserve, managed by the Nature Conservancy. The area is near the intersection of the proposed corridor and U.S. 41 and encompasses 0.1 acre.

If the corridor alignment is shifted to the north, there would be several more conflicts with managed lands, particularly in Illinois. The Thorn Creek Greenway within Cook County represents a broad and unbroken environmentally sensitive area. The Plum Creek Greenway becomes denser near the Cook County-Will County border to the north.

Likewise, if the corridor alignment were shifted south, there would be greater conflict with managed lands associated with the Kankakee River Basin. This includes the 1,800-acre LaSalle State Fish and Wildlife Area and the Grand Kankakee Marsh, which contains more than 200 state-listed threatened and endangered species and five Federally listed threatened and endangered species.

#### Wetlands and Floodplains

There are scattered wetlands within the Illiana Corridor area. The total land area of all wetlands within a 1.5-mile radius of the proposed Corridor location is about 2,200 acres. Most are relatively small, with the average wetland being less than four acres. Wetland locations based on the National Wetlands Inventory (NWI) maintained by the U.S. Fish and Wildlife Service are displayed in Figure 2.5. The NWI divides wetlands into several categories. The dominant wetland type within the corridor area is freshwater emergent wetland, but there also are freshwater forested/shrub wetlands, and freshwater ponds and lakes.

Figure 2.5 Illiana Corridor Land Cover

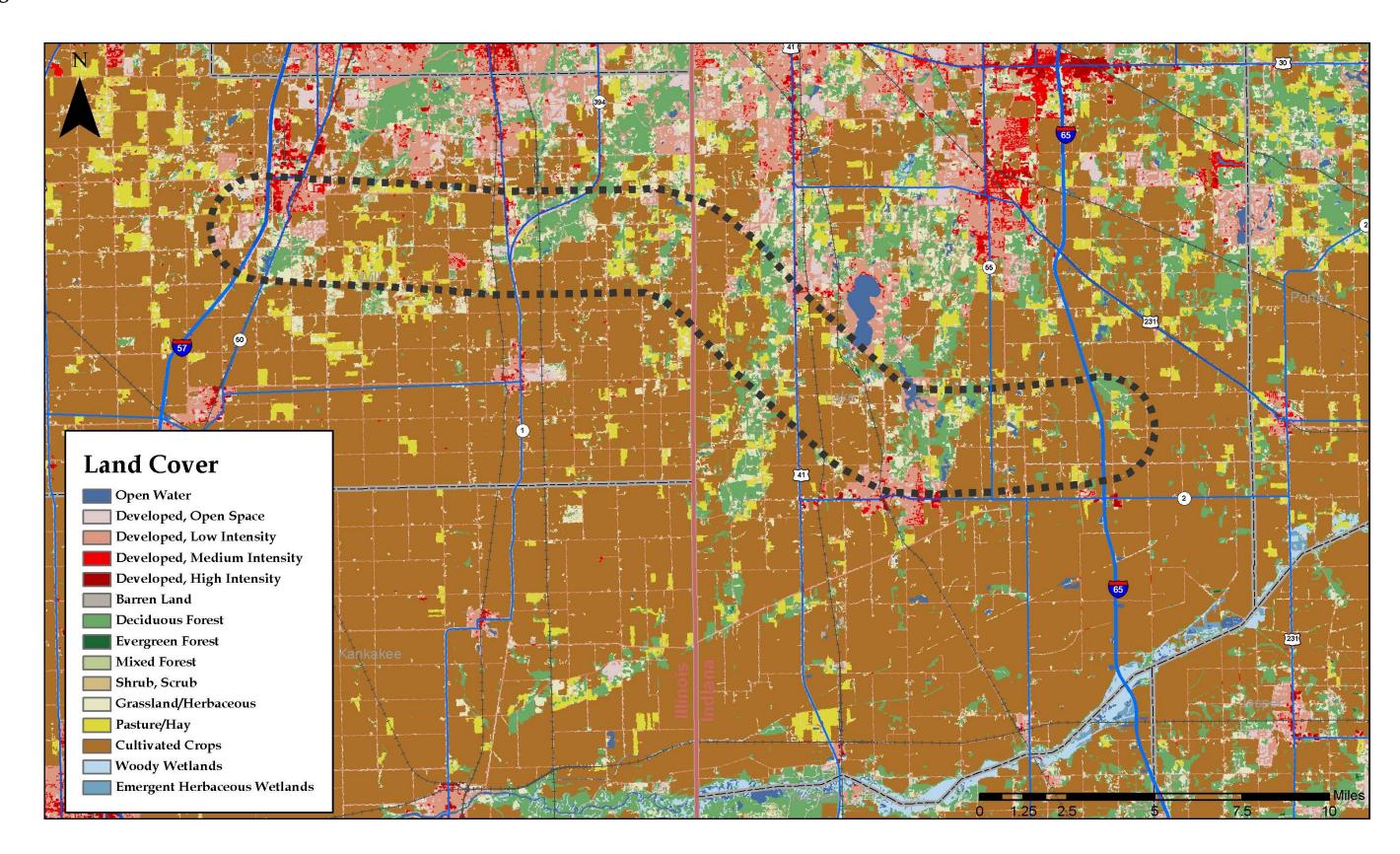
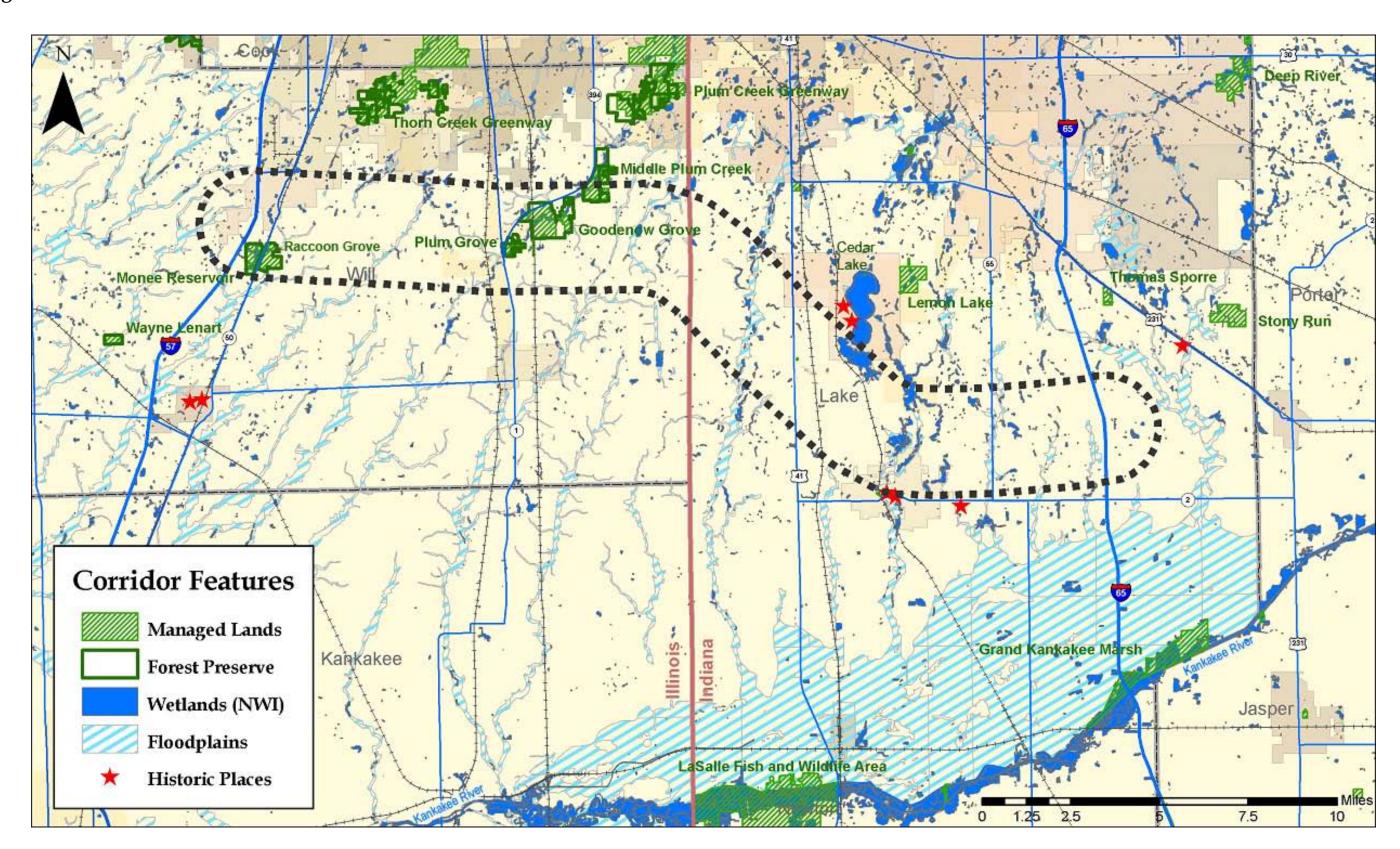


Figure 2.6 Illiana Corridor Features



Concentrations of wetlands are rare within the corridor. The largest wetlands in the area are located south of Cedar Lake. They are primarily freshwater emergent wetlands. There also are significant wetlands associated with some of the managed areas discussed earlier. Both the Plum Creek Greenway and the Monee Reservoir have surrounding wetlands.

Figure 2.6 also displays area floodplains which are scattered throughout the corridor area. The heaviest concentration surrounds the Kankakee River Basin, south of the corridor.

The western portion of the corridor passes through the Lower Des Plaines and Calumet River Watersheds, considered very high priority for protection and restoration. To the east the corridor runs through the Kankakee River Watershed. The Northwestern Indiana Regional Planning Commission (NIRPC) has developed guidelines for roadways to minimize damage to water quality standards.

If the corridor location were shifted north, there would be marginally increased conflicts with wetlands, particularly surrounding Cedar Lake.

If the corridor location were shifted south, there would be major conflicts with the wetlands in and surrounding the Kankakee River Basin. The Kankakee River Basin contains roughly 8,000 acres of wetland between I-57 and I-65. Floodplain runs as far as six and a half miles north of the river.

#### Landmarks

Several historic buildings, listed on the National Register of Historic Places, are located north and south of the corridor, mainly in Peotone, Cedar Lake, and Lowell. These landmarks also are displayed in Figure 2.5. Schools, hospitals, and religious facilities also are clustered around the small towns of the region.

#### **Threatened and Endangered Species**

In Will County, Illinois, there are 56 species listed as threatened or endangered by the U.S. Fish and Wildlife Service. Of these species, 26 are endangered. The list includes a large variety of birds and prairie plants. In particular, there is a high concentration of endangered and threatened species within the Goodenow Grove Forest Preserve.

In Lake County, Indiana, the U.S. Fish and Wildlife Service lists seven threatened and endangered species. However, the Indiana Department of Natural Resources lists an additional 127 Lake County species as endangered or threatened within the State of Indiana. The majority of these are vascular plants. The state list also includes several insects and reptiles. The highest concentration of Indiana's threatened and endangered species occurs in the protected Grand Kankakee Marsh area, including portions of Lake and Newton counties, with more than 200 state-listed threatened and endangered species and five Federally listed threatened and endangered species.

#### **Conclusions**

Generally, the Illiana Corridor as proposed faces limited environmental obstacles. A significant proportion of the corridor is composed of cultivated agricultural lands. Most regional environmentally sensitive areas lie either to the north or south of the corridor.

Based on a review of the Illiana Corridor's environmental features, four environmentally sensitive areas emerge:

- 1. Raccoon Grove/Monee Reservoir area;
- 2. Plum Creek Greenway (including Goodenow Grove, Middle Plum Creek, and Plum Grove);
- 3. Wetlands south of Cedar Lake; and
- 4. Kankakee River Basin and associated floodplains and watersheds.

## 3.0 Consistency with Local and Regional Planning

The Illiana Corridor has been included as a component of both the Chicago Metropolitan Agency for Planning (CMAP) 2030 Regional Transportation Plan and the Northwestern Indiana Regional Planning Commission's (NIRPC) Connections 2030 Regional Transportation Plan. (The proposed Corridor had been included in the agencies' earlier RTPs, as well.) In the CMAP 2030 RTP, the proposed Illiana was broken up into three separate segments between I-80 and the state line: I-80 at I-355 to I-57 (South Suburban Corridor); I-57 to IL 394 (I-57/IL 394 Connector); and IL 394 to the state line (Illiana). Each of the three segments was included in the Plan as a "corridor recommendation," indicating that funding for construction had not been identified, but that consideration should be given to preservation of ROW, in the event it would become threatened.

In the NIRPC Connections 2030 Plan, the Illiana Corridor has been identified as a "New Highway for Further Study." As such, NIRPC has recognized and endorsed the need for a feasibility study to evaluate the project's purpose and need, as well as regional impacts. In addition, the study would identify the type of facility that would best serve this portion of the region. NIRPC also has recognized the importance of preserving right-of-way in the proposed corridor. In a prior study that was completed for NIRPC in 1999, the South Suburban Expressway, as it was then called, was identified as having the potential to relieve congestion on I-80/I-94 (The Borman Expressway).

In 1999, the "Illiana Expressway Coalition" was formed by local elected officials on both sides of the state line to lobby in favor of the proposed Expressway. The Coalition remains active today in promoting the project. This group could serve as the framework for a Bi-state Corridor Planning Council, which CMAP has recommended to oversee future phases of the Illiana Corridor project.

On December 12, 2006, the states of Indiana and Illinois, through their respective departments of transportation (INDOT and IDOT), entered into a Bi-state Agreement in support of the Illiana Corridor. By entering into this agreement, the two states demonstrated their commitment to studying the corridor's potential for enhancing the safety and flow of traffic both within and through the bi-state region. The agreement expresses the intent of both states to consider alternative funding options, such as constructing the roadway as a tollway, as well as addressing the shared cost between INDOT and IDOT for the upcoming planning, National Environmental Policy Act (NEPA) documentation and preliminary engineering phases of the project. The Bi-state Agreement is a significant step toward providing a framework and establishing procedures for upcoming studies for developing the Illiana Corridor.

In May 2007, Senate Bill 105 (SB105) was signed into law by Indiana Governor Mitch Daniels. This legislation enables INDOT to perform a feasibility study to assess the needs of the Illiana Corridor and identify an alignment corridor. The feasibility study is to address use, cost, and operations of the proposed expressway, as well as traffic projections, economic impacts, alternative routes, and funding options. SB 105 calls for the establishment of a review committee to evaluate the study findings, as well as other available information regarding the proposed project, and report to the Governor and the legislative council. The passage of this legislation definitely demonstrates a commitment on behalf of Indiana lawmakers toward the Illiana Corridor project.

Concurrent with the submittal of the Illiana Corridor CFP Phase 2 Application, the Michigan Department of Transportation (MDOT) is preparing a similar application to address the I-94 Corridor, which is displayed in Figure 3.1. The objectives of the I-94 study are similar in nature to those of the Illiana Corridor in seeking to ease congestion and provide alternatives for travelers and shippers on this major international commerce route. In identifying the Purpose and Need for the Illiana Corridor, the deficiencies of the parallel I-94 corridor will be addressed. It is likely that I-94 could receive significant relief from its current and projected future congestion by the Illiana Corridor route, while at the same time, improvements to I-94 could result in more traffic in the Illiana Corridor. Based on their overlapping objectives, there will be significant opportunities for coordination between these two efforts, thus providing for a tristate corridor initiative.

Figure 3.1 Michigan Department of Transportation I-94 Corridor

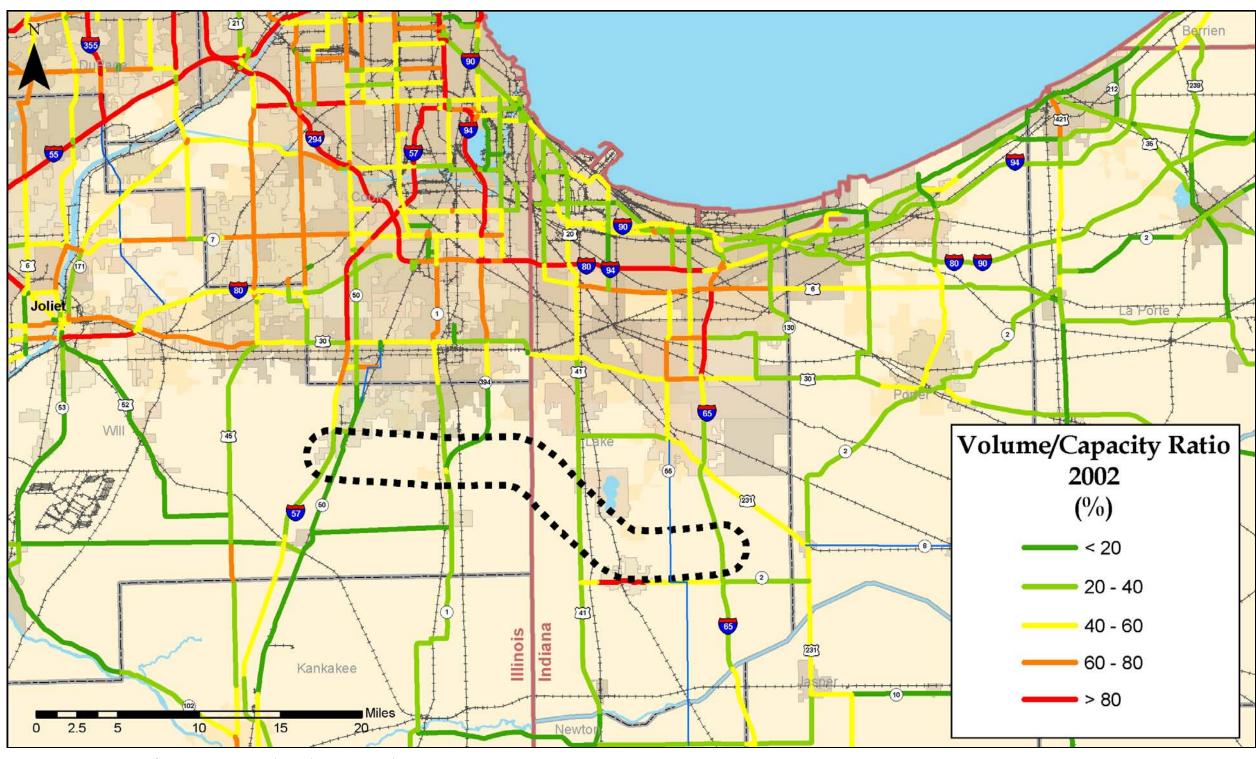


## 4.0 Congestion Reduction/ Mobility Benefits

The three major routes connecting Northern Indiana and the Chicago area are I-80/I-94 (known as the Borman Expressway in Lake County), U.S. 30, and I-90. Combined, these three routes carry over 215,000 vehicles per day across the state line. The Borman Expressway in particular, which in 2002 carried an Annual Average Daily Traffic (AADT) of over 155,000 at its heaviest point, experiences severe congestion and has been identified by the State of Indiana as the number three bottleneck within the State.

Figures 4.1 and 4.2 show traffic congestion levels for 2002 and projected congestion for 2035, based on volume to capacity ratios, from the U.S. DOT's Freight Analysis Framework 2. These projections consider both passenger and freight traffic on the roadways. Lines colored "red" are operating at volumes that are at least 80 percent of the roadway's capacity, which is considered unacceptable. The "orange" lines are operating at volumes that are between 60 and 80 percent of capacity, indicating significant delay. There were several unacceptable roadway segments in 2002, but the number of unacceptable traffic lanes in the Chicago region is projected to dramatically increase by 2035.

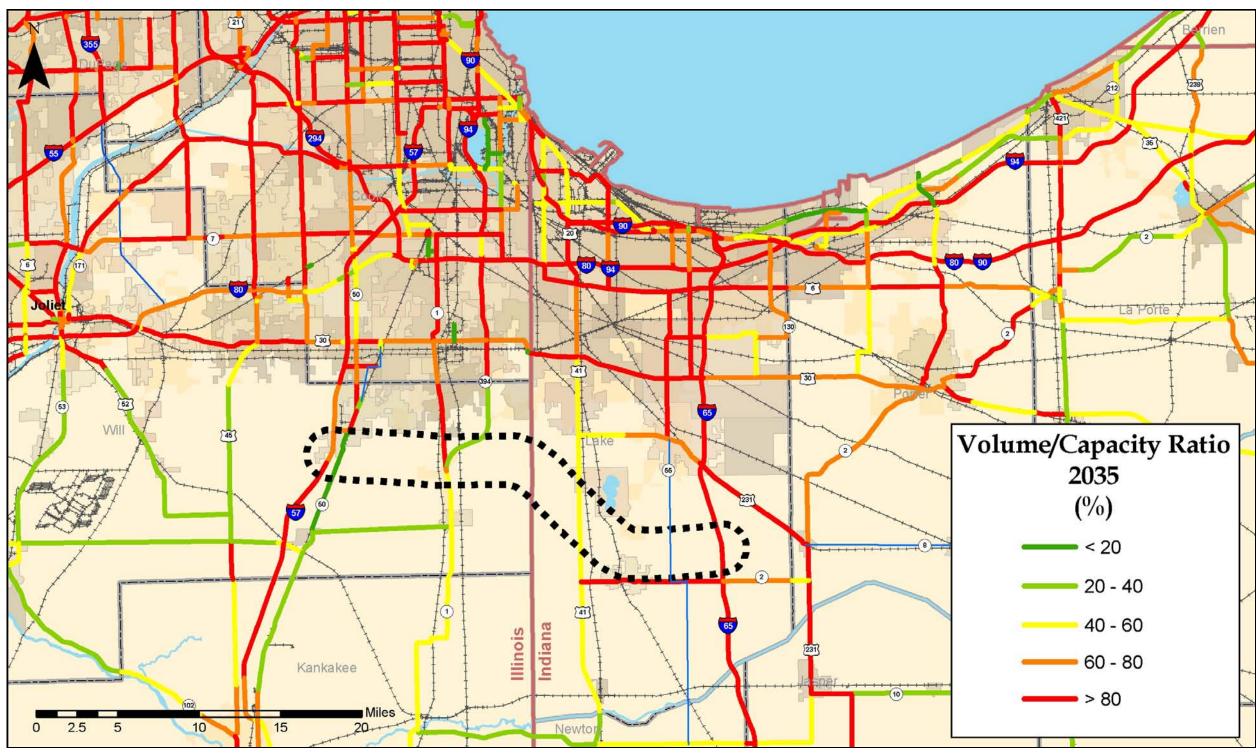
Figure 4.1 Volume/Capacity Ratios for the Chicago Region in 2002<sup>a</sup>



Source: U.S. Department of Transportation, Freight Analysis Framework 2.

<sup>&</sup>lt;sup>a</sup> Capacities do not account for travel lanes on I-94 and I-65 that were added since 2002.

Figure 4.2 Volume/Capacity Ratios for the Chicago Region in 2035<sup>a</sup>



Source: U.S. Department of Transportation, Freight Analysis Framework 2.

<sup>&</sup>lt;sup>a</sup> Capacities do not account for travel lanes on I-94 and I-65 that were added since 2002.

Preliminary testing of the proposed Illiana Corridor, without tolls, has indicated that with construction of the proposed expressway, total traffic volume on the Borman Expressway will be reduced approximately 12 percent in the year 2030, when compared to the nobuild condition, with heavy truck traffic being reduced by 21 percent. Total volumes on U.S. 30 are anticipated to be reduced by around four percent in the same year as a result of diversions to the Illiana Corridor. Heavy truck volumes on U.S. 30 are estimated to decrease by 7 percent.

The Illiana Expressway itself is expected to carry a total volume of approximately 88,000 daily vehicles in the year 2030. Of these vehicles, approximately 20 percent are expected to be heavy trucks. These preliminary results show encouraging impacts for the reduction of congestion on the Borman and U.S. 30. In addition, the anticipated truck volumes within the Illiana Corridor substantiate the potential need for truck-only lanes on the proposed facility.

The inclusion of tolls on the Illiana would be expected to reduce the volumes on the roadway and as a result lessen the impacts it would have on the other major routes within the corridor. The preliminary results have shown that demand on the Illiana is great enough to be approaching its limit on daily capacity. Since demand for the facility appears to be so great, the introduction of some form of pricing measure should not drastically reduce the anticipated traffic volumes on the Illiana.

#### ■ 4.1 Regional Impacts

Using the NIRPC travel demand model, systemwide vehicle miles traveled have been estimated for the Illinois and Indiana portions of the region. These results are presented to illustrate that the impacts of the Illiana are not confined to just the corridor, but felt throughout the region.

The following table shows preliminary comparisons of vehicle miles traveled for autos, non-heavy trucks and heavy trucks for the build (Illiana Corridor) and no-build scenarios.

Table 4.1 Daily VMT for Illinois and Indiana Year 2030

	No B	Build	Bui	ild
Vehicle Type	Illinois	Indiana	Illinois	Indiana
Autos	173,914,554	24,327,133	175,617,836	23,418,490
Non Heavy Trucks	16,901,345	1,318,989	16,951,240	1,301,879
Heavy Trucks	6,740,092	3,156,784	7,019,305	2,785,482
Total	197,555,991	28,802,906	199,588,381	27,505,851

Table 4.2 Total Daily Regional VMT for Build and No Build Year 2030

Vehicle Type	No Build	Build	Difference	Percent Difference
Autos	198,241,687	199,036,327	794,640	0.40%
Non Heavy Trucks	18,220,334	18,253,119	32,785	0.18%
Heavy Trucks	9,896,876	9,804,787	(92,089)	-0.93%
Total	226,358,897	227,094,233	735,336	0.32%

From the above tables, the following observations can be made regarding construction of the Illiana Expressway:

- VMT in Indiana will decrease as a result of the Illiana Corridor, while it will increase in Illinois. In both states the Illiana Corridor is providing congestion relief, but in Indiana, it is also shortening travel distances.
- Overall system VMT increases, but heavy truck VMT decreases. This may be due to the longer overall trip lengths of heavy trucks and the opportunity the Illiana Corridor provides to shorten these lengths. The reduction in VMT for heavy trucks should greatly improve air quality in the region.
- Overall VMT for autos and non-heavy trucks increases. Based on the selection of the Illiana Corridor route over the existing route, this implies that the new route is faster, thus these vehicles are realizing faster speeds as a result of the Illiana Corridor and are willing to travel a greater distance.

## 5.0 Economic Benefits and Support of Commerce

The Illiana Corridor is located within the bi-state region of northeast Illinois and north-west Indiana, a vital regional economy with significant freight-based industry activity. This section of the application focuses on the economic opportunities related to the proposed Illiana Corridor and is divided into two main sections:

- 1. **Economic and Demographic Profile of the Illiana Corridor –** Focused on the counties within the proposed corridor Will County in Illinois and Lake County in Indiana.
- 2. **Estimated Economic and Travel Benefits of the Illiana Corridor –** Using accepted travel, user benefit, and economic models, preliminary estimates of the benefits of the Illiana Corridor to the regional and national economies are identified.

#### ■ 5.1 Economic and Demographic Profile of the Illiana Corridor

#### **Demographics and Income**

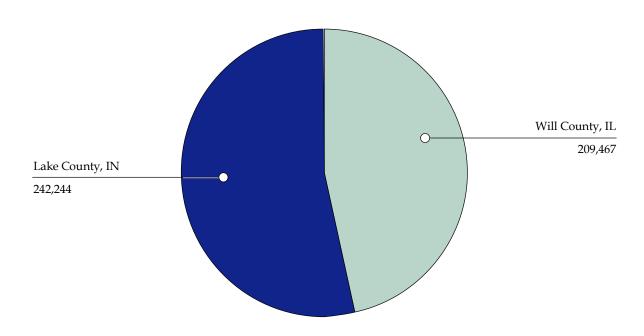
Collectively, the two corridor counties reported a population of almost one million, with an even split between Will and Lake counties. While many of the counties in the broader region have experienced increases in population over the past 10 to 15 years, it is Will County in Illinois that is growing most rapidly, with an increase of 40.6 percent between 1990 and 2000. More recent figures have demonstrated a continuation in population growth (33 percent) in Will County between 2000 and 2006, placing it as the fastest growing county in Illinois and one of the fastest growing counties nationally.

According to the U.S. Bureau of Economic Analysis, in 2004 the average per capita income for individuals living within the two Illiana Corridor counties was \$29,321, and in aggregate totaled \$32.5 billion. Individuals living in Will County had the highest per capita income at \$30,047, slightly below the national average of \$33,050.

#### **Employment**

The two-county region provides approximately 450,000 jobs, with slightly higher employment in Lake County. Figure 5.1 displays the corridor employment distribution by county in 2004.

Figure 5.1 Employment Distribution by County
Number of Employees



Source: U.S. Bureau of Economic Analysis.

Employment growth within the Illiana Corridor has experienced similar trends to those observed nationally over the last decade, with modest employment growth occurring between 1994 and 1999, a downturn during the national recession in 2000 and 2001, and steady job growth over the past five years. Of the two counties, Will County demonstrated the most significant employment growth, with a 10-year average rate of 3.7 percent, well above the U.S. average growth rate of 1.6 percent. Table 5.1 presents employment growth each year between 1994 and 2004, demonstrating that the corridor economy has grown more rapidly than the U.S. overall.

**Table 5.1 Annual Employment Growth** 1994-2004

Year	National	Two-County Average	Will County	Lake County
1994-1995	2.59%	2.42%	4.35%	0.48%
1995-1996	2.13%	2.50%	3.16%	1.84%
1996-1997	2.27%	2.73%	2.94%	2.51%
1997-1998	2.58%	2.62%	3.94%	1.30%
1998-1999	2.08%	3.46%	6.13%	0.78%
1999-2000	2.33%	1.73%	4.62%	-1.17%
2000-2001	0.15%	0.85%	2.55%	-0.85%
2001-2002	-0.23%	0.45%	2.64%	-1.75%
2002-2003	0.51%	1.78%	2.31%	1.24%
2003-2004	1.55%	2.39%	4.49%	0.28%
10-Year Average	1.60%	2.10%	3.72%	0.47%

#### **Industry Profile**

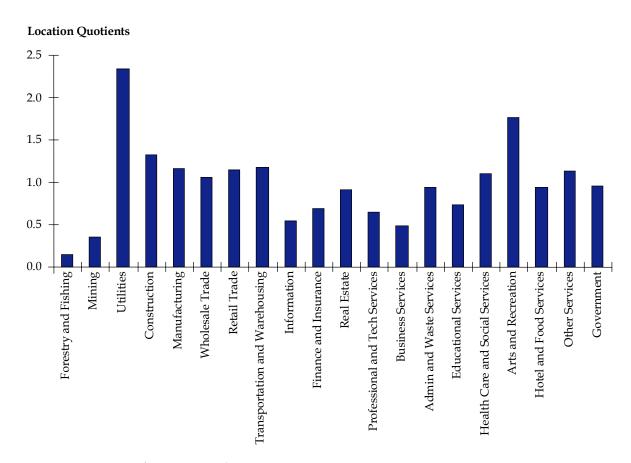
As a region, the economies of the Midwest and the Illiana Corridor, more specifically, have experienced modest growth in recent years, with the professional, business, and management services, education and health services, and hospitality sectors leading the way. Most significantly for a proposed highway corridor explicitly planned to facilitate goods movement and economic development, the industry mix of the corridor economy is heavily represented by freight-transportation industries. As shown in Table 5.2, the corridor economy has a higher concentration of economic activity than the U.S. average in five of the most freight-intensive industries: construction, manufacturing, wholesale trade, retail trade, and transportation and warehousing. In fact, the manufacturing and transportation/warehousing industries are more concentrated in both corridor counties than the U.S. overall highlighting the importance of efficient goods movement in this region of the country (not to mention the huge freight-related industry activity in nearby Chicago).

Table 5.2 Industry Employment Share by Industry Sector for 2004

		Two-County		
Industry	National	Average	Will County	Lake County
Forestry, Fishing, and Other Related Activities	0.58%	0.8%	0.13%	0.05%
Mining	0.50%	0.17%	0.22%	0.13%
Utilities	0.34%	0.80%	0.96%	0.66%
Construction	5.99%	7.91%	9.23%	6.77%
Manufacturing	8.75%	10.19%	9.20%	11.05%
Wholesale Trade	3.64%	3.86%	4.82%	3.03%
Retail Trade	11.04%	12.61%	12.46%	12.74%
Transportation and Warehousing	3.15%	3.71%	3.67%	3.75%
Information	2.08%	1.14%	1.43%	0.89%
Finance and Insurance	4.74%	3.31%	3.52%	3.12%
Real Estate and Rental and Leasing	3.70%	3.39%	3.57%	3.23%
Professional and Technical Services	6.35%	4.08%	4.31%	3.89%
Management of Companies and Enterprises	1.04%	0.50%	0.45%	0.53%
Administrative and Waste Services	6.05%	5.70%	5.55%	5.84%
Educational Services	2.02%	1.48%	1.65%	1.34%
Health Care and Social Assistance	9.93%	10.94%	8.45%	13.10%
Arts, Entertainment, and Recreation	2.03%	3.58%	3.10%	4.00%
Accommodation and Food Services	6.75%	6.35%	5.96%	6.69%
Other Services, except Public Administration	5.68%	6.45%	6.38%	6.51%
Government and Government Enterprises	13.91%	13.32%	14.33%	12.45%

Figure 5.2 presents industry concentrations for the Illiana Corridor (Will and Lake counties) in terms of location quotients compared to the United States. Industries with location quotients (LQ) above 1.0 indicate a relative strength or concentration of economic activity and those below 1.0 represent a relative under representation of economic activity. The industries with the highest LQs are utilities and arts, entertainment, and recreation. Utilities typically require a large volume of truck and rail activity, while the arts and recreation are more passenger- and tourist-oriented. Again, the heavier trade industries such as manufacturing, construction, and warehousing are all above 1.0 while some of the less transportation intensive service industries (finance, professional, and education services) are well below 1.0.

Figure 5.2 Location Quotients for Illiana Corridor 2004



The many corridor firms invested in the distribution and movement of goods would directly benefit from an east-west corridor between I-57 and I-65. Representing 10 percent of the entire workforce and over 46,000 jobs in 2004, the manufacturing sector is the fourth largest sector within the corridor economy. The most common types of manufacturing include the production of plastics and plastic products, the assembly of automobile parts and welding materials, and the fabrication of cabinets and electronic components. Table 5.3 shows the number of jobs in the manufacturing, retail trade, and the transportation and warehousing industries within the corridor economy and nationally.

Table 5.3 Number of Jobs for the Manufacturing, Retail Trade, and Transportation and Warehousing Industries for 2004

		Two-County		
Industry	National	Total	Will County	Lake County
Manufacturing	14,876,100	46,042	19,273	26,769
Retail Trade	18,771,900	59,956	26,102	30,854
Transportation and Warehousing	5,360,600	17,584	7,681	9,903
Total (All Sectors)	170,091,500	451,711	209,467	242,244

The transportation and warehousing sector (which includes trucking companies, freight rail, and other distribution activity) has seen considerable growth, with a 10.9 percent increase in jobs over the past three years. A region's economy depends on the ability to move freight and goods; especially one that sustains sectors heavily dependent upon transportation infrastructure. Building additional transportation capacity makes economic sense when it can both enhance regional industries as well as facilitate the movement of longer distance passenger and freight trips, increasing the competitiveness of the U.S. economy.

#### ■ 5.2 Economic and Travel Benefits of the Illiana Corridor

The location of the proposed Illiana Corridor (within large MSAs, providing critical eastwest connections) has the potential to produce substantial travel efficiency and economic benefits to both the regional and national economies. Based on preliminary travel model results produced by the Northwestern Indiana Regional Planning Commission (NIRPC), direct travel benefits to regional and national travel have been estimated, as well as broader economic development benefits from reduced transportation costs. Based on estimated changes in vehicle hours of travel (VHT) and vehicle miles of travel (VMT), direct travel effects include benefits to travel time, travel operating costs (fuel and nonfuel), accidents, air emissions, and pavement damage. NIRPC provides data to estimate these effects for autos, nonfreight trucks, and freight (heavy) trucks for trips within, through, into, and out of the region. User benefits are estimated from standard approaches provided by FHWA-sponsored models such as the Surface Transportation Efficiency Analysis Model (STEAM). Fuel and nonfuel operating costs are based on per mile of travel cost estimates from AAA for autos, and scaled up for trucks based on STEAM operating cost parameters.

Total U.S. benefits in 2030 resulting from improvements in the areas described above (travel time, operating costs, accidents, air emissions, and pavement damage) is estimated

to be \$859 million, with a regional distribution of \$294 million to the Northwest Indiana MSA, \$96 million to the Chicago MSA, and \$468 million to the rest of the country. The large share of benefits to the rest of the country reflects the ability of the Illiana Corridor to facilitate longer distance trips, in particular freight trucks. The slightly lower benefits in the Chicago MSA (compared to the Indiana counties near the corridor) reflects an offset in increased VMT – in essence, some auto travelers may actually drive slightly longer distances to benefit from a faster, less-congested trip. By far the largest share of benefits is due to reduced travel times provided by the Illiana Corridor. About 81 percent of this benefit accrues to auto travel, 11 percent to nonfreight trucks, and 8 percent to freight trucks.¹ The heavy truck benefits accrue mostly outside of the Northwest Indiana region with the Chicago MSA experiencing 29 percent of the impact and the rest of the country getting an additional 65 percent, reflecting the large amount of long-distance freight trips. Conversely, the Northwest Indiana region receives nearly 40 percent of passenger car and nonfreight truck impacts, compared to 9 percent for the Chicago MSA.

#### **Economic Impacts**

In addition to the direct travel benefits described above, the Illiana Corridor is expected to have additional economic impacts to regional and national commerce. The national economic benefits of the Illiana Corridor are largely covered by the volumes of longer distance freight and passenger travel that are expected to enjoy faster and more direct travel within the corridor. For example, it is estimated that long-distance freight trucks will experience (by 2030) reductions in operating costs of \$15.6 million, savings in travel time valued as \$45.7 million and additional benefits to the national highway system in terms of reduced emissions, accidents, and pavement damage.

Regional economic impacts also can be substantial, as the Illiana Corridor leverages the large concentration of transportation-dependent industries within the region to reduce travel and logistics costs, improve connectivity to suppliers, and increase accessibility to markets and multimodal facilities. Applying a standard economic impact analysis approach, the business portion of travel benefits can be converted into industry cost savings to use as input to the Regional Economic Models, Inc. (REMI) model to estimate broader economic effects in terms of jobs, income, and business output.<sup>2</sup>

Tables 5.4 and 5.5 provide summaries of the estimated regional economic effects from the Illiana Corridor. The Gary-Michigan City MSA in Indiana covers Lake, Porter, Jasper,

<sup>1</sup> It is worth noting that these travel time benefits do not include reliability effects (i.e., reduced variability in travel speeds) which can produce significant benefits, especially in larger urban markets and are the focus of significant current federal research. To estimate value of time, we used \$13.45/hour for auto trips (source: Texas Transportation Institute) and approximately \$30/hour for truck trips based on the FHWA HERS model.

<sup>&</sup>lt;sup>2</sup> This approach is similar to the Indiana DOT's Major Corridor Investment Benefits Analysis System (MCIBAS) that employs travel model, user benefit, and economic impact models.

Newton, and LaPorte counties; the Chicago MSA in Illinois includes Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, and Will counties. Low and high ranges of economic impacts are provided – the low includes just the value of the direct travel benefits rippling through the regional economy, while the higher values include additional logistics and supply chain effects estimated using parameters recommended by the U.S. DOT Freight Economic Impact Guidebook.<sup>3</sup>

**Table 5.4 Regional Economic Impacts in 2030** 2007 Dollars

_	Indiana MSA		Chicag	Chicago MSA		Indiana-Illinois Region	
	Low	High	Low	High	Low	High	
Employment	1,431	1,542	538	801	1,969	2,343	
Income (in Millions)	\$95	\$107	\$89	\$131	\$184	\$237	
GRP (in Millions)	\$91	\$101	\$69	\$100	\$160	\$201	
Output (in Millions)	\$187	\$211	\$180	\$264	\$367	\$475	

Source: Regional Economic Models, Inc. and Cambridge Systematics, Inc.

**Table 5.5** Regional Economic Impacts in 2020, 2030, and 2040 2007 Dollars

	Without Supply Chain Benefits			its With Supply Chain Benefi		
	2020	2030	2040	2020	2030	2040
Employment	1,183	1,969	2,296	1,401	2,343	2,779
GRP (in Millions)	\$95	\$184	\$249	\$120	\$237	\$327

Source: Regional Economic Models, Inc. and Cambridge Systematics, Inc.

As shown, job impacts in the region alone range from 540 in the Chicago MSA to 2,340 for the broader region depending on the low and high estimates. Due to the planned nature of the facility as a facilitator of goods movement and economic development, it is likely that a high percentage of this job growth will be in freight related industries. Regionwide benefits in Table 5.5 indicate that the benefits grow over time, reaching a potential of

<sup>&</sup>lt;sup>3</sup> http://www.dot.gov/freight/guide061018/index.htm.

nearly 2,800 additional jobs and \$327 million in gross regional product by 2040. Over a 30-year time period from 2018 (approximate completion date of the proposed corridor under the accelerated timeline), total gross regional product benefits discounted to present value terms total \$1.4 to \$1.8 billion in economic activity for the region. This substantial economic benefit does not include other benefits such as the national-level travel efficiency effects and the vast travel-time benefits to passenger travel.

#### **Market Accessibility**

The Illiana Corridor contains or is within close proximity to a number of existing or proposed air facilities, rail operations, and regional intermodal centers. However, many of these facilities are not interconnected with one another. Currently, the existing highway network provides a number of north-south movements along I-57, IL 50, IL 1, U.S. 41, SR 55, and I-65, but very few east-west options exist. Consequently, a major east-west facility, such as the Illiana Corridor could provide much improved accessibility to other major multimodal transportation facilities in the region. Today's increasingly global economy places emphasis on efficient connections between modes and between businesses and transportation facilities, such that the type of improved accessibility provided by the Illiana Corridor could be greatly valued by the private sector and result in improved economic development opportunities.

Airport Facilities - Currently, there are three airport facilities located within a 10-mile buffer of the Illiana Corridor: Frankfort Airport (FAA LID: LL40), Sanger Airport at Bult Field Airport (FAA LIS: C56), and Lake Village Airport (FAA LID: C98). A number of smaller airfields are scattered to the south of the corridor. For the most part, airport facilities are accessible by local or state roadways alone.

Frankfort Airport and Sanger Airport are both located within Will County, and primarily service smaller single- and multiengine planes. Frankfort Airport, located one mile southeast of Frankfort, Illinois, is privately owned and operated, and averages 60 aircraft daily. Sanger Airport, located three miles southeast of Monee, Illinois also is privately owned and operated, and averages 36 aircraft daily. Lake Village Airport, located one mile northwest of Lake Village, Indiana, is privately owned and operated, and averages 19 aircraft daily.

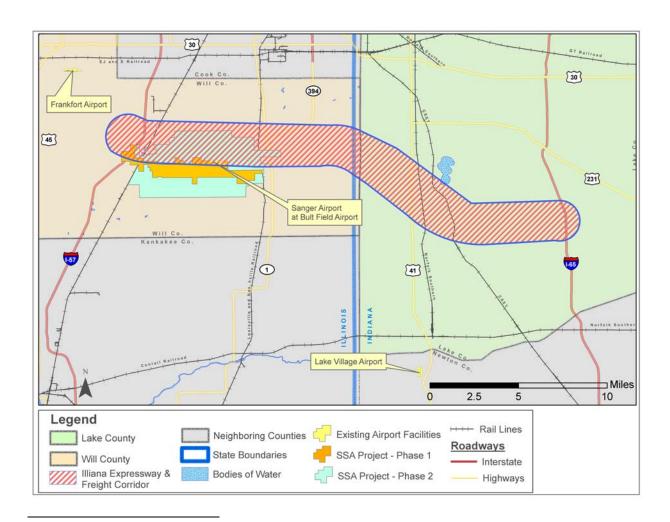


Sanger Airport at Bust Field Airport from the east looking west. Photo taken 12-Nov-2006 http://www.airnav.com/ airport/C56.

Gary Chicago International Airport, the third Chicagoland Airport, is located three miles northwest of Gary, Indiana, and is publicly owned and operated. The airport averages 123 aircraft daily, and services smaller single-, multi-engine planes, and jet aircraft. According to reported statistics, 48 percent of operations are for local general aviation, 45 percent for transient general aviation, 4 percent for air taxi services, and 2 percent for commercial activities.

In an attempt to reduce runway and terminal congestion at O'Hare International Airport and Chicago Midway International Airport, a south suburban airport facility has been in development since the mid-1980s. The proposed airport would be designed to accommodate larger planes, and would serve as the fourth major airport in the Chicago metropolitan area. The project, titled the South Suburban Airport (SSA), currently is sited on land located between I-57 and IL 1. The completion of the SSA would require incorporating Sanger Airport into the SSA's boundary and operations. Since 2002, the Illinois Department of Transportation (IDOT) has been moving ahead with the project by purchasing land surrounding the Will County airport site.<sup>4</sup> If completed, the SSA facility would provide increased air freight capabilities and intermodal connections for distribution throughout the region, and would clearly gain from the development of the Illiana Corridor.

Figure 5.3 Illiana Corridor Air-Rail Transportation Infrastructure



<sup>&</sup>lt;sup>4</sup> http://www.southsuburbanairport.com/ssa\_history.asp.

**Rail/Intermodal Freight Facilities –** As shown in Figure 5.3, four active freight rail lines currently operate within the Illiana Corridor. The lines provide north-south connections between Chicago and St. Louis and Indianapolis. Currently, no major intermodal facili-

ties operate within the corridor's boundaries, however a major intermodal distribution center is located 15 miles to the west of the corridor in Will County, and thus the Illiana Corridor could provide greatly enhanced accessibility to that facility.

According to the Will County Center for Economic Development, the CenterPoint Intermodal Center, located in Elwood, Illinois, is one of largest distribution centers in North America. Occupying 3.4 million square feet, the facility provides intermodal distribution and warehousing capabilities to



CenterPoint Intermodal Center: Wal-Mart Distribution Center http://www.jada.org/CIC-Business%20Info.htm

eight companies, including Wal-Mart, Georgia Pacific, DSC Logistics, and the Potlatch Corporation. The Wal-Mart facility alone employs over 1,000 individuals.

The potential exists to develop new intermodal facilities within the corridor, as well as provide additional flexibility to existing rail freight operations and intermodal distribution centers. One such facility has been proposed and currently is in the early development stages along the UP/CSX rail line in the Village of Crete. This proposed 850-acre intermodal yard would be located in close proximity to the conceptual Illiana interchange with IL 1/IL 394. The Illiana Corridor's strategic location along freight rail lines and between two Interstate roadways, provides immense opportunity to enhance regional accessibility and increase intermodal activity – a vital and growing industry sector to the Chicagoland economy.

# 6.0 Freight Mobility

The Chicago area is a well-known freight transportation hub, with excellent north-south and east-west highway access, service by the six largest North American railroads, shipping on Lake Michigan, and one of the nation's top air cargo hubs at O'Hare. In total, 1.2 billion tons of freight originated and terminated in the Chicago region in 2002.<sup>5</sup> This is projected to grow steadily through 2035, when the volumes are forecast at 2.2 billion annual tons of freight. As can be seen in Table 6.1, this represents growth of nearly 80 percent.

Table 6.1 Growth in Freight Traffic for the Chicago Region and the United States

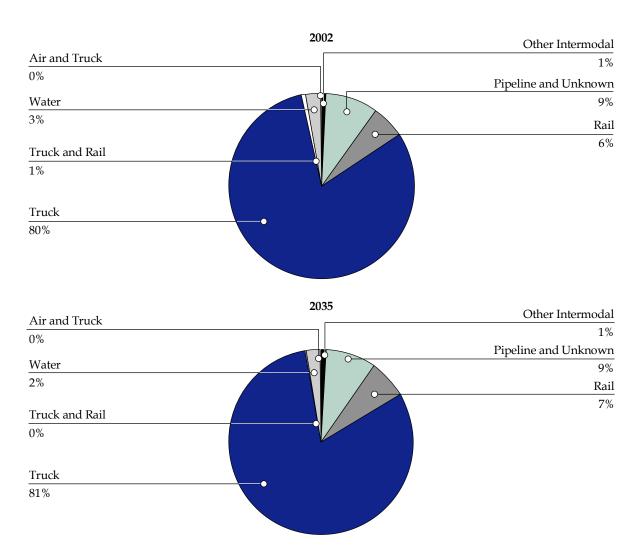
Year	Chicago Region (Illinois, Indiana)					
	Annual Tons (Billions)	Annual Growth	Cumulative Growth			
2002	1.2	N/A	N/A			
2010	1.4	2.0%	16.9%			
2015	1.6	0.9%	25.8%			
2020	1.7	0.8%	34.1%			
2025	1.8	1.3%	48.3%			
2030	2.0	1.2%	62.6%			
2035	2.2	1.2%	78.9%			

Source: U.S. Department of Transportation, Freight Analysis Framework 2.

As is true throughout the United States, trucks are the predominant mode in the Chicago region for both originating and terminating freight movements. For originations, trucks handled 80 percent of the tonnage, and that percentage is forecasted to slightly increase by 2035. Truck percentages are less for terminating traffic, due to the large quantities of coal (not elsewhere classified), crude petroleum, and gasoline arriving in pipelines, but still trucks account for two of every three tons terminating in the region. (See Figures 6.1 and 6.2.)

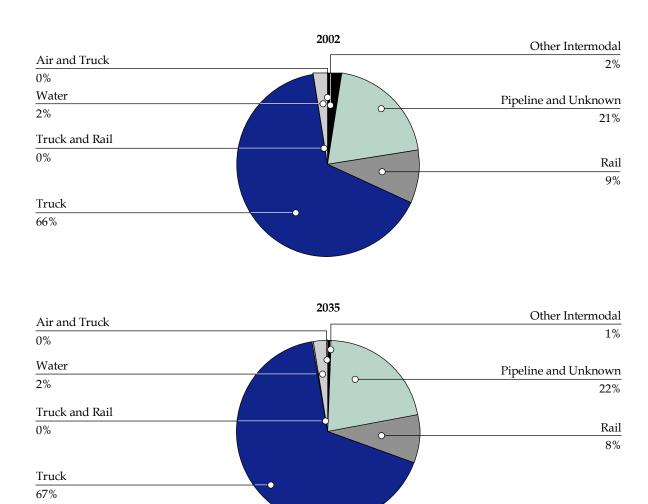
<sup>&</sup>lt;sup>5</sup> Data are from the U.S. Department of Transportation, Freight Analysis Framework 2. The Chicago region is defined as the Chicago zone in Illinois (FAF2 Region 29), and the Chicago zone in northwest Indiana (FAF2 region 32).

Figure 6.1 Originations of Freight Traffic in Chicago Region by Mode Percentages Based on Annual Tons



Source: U.S. Department of Transportation, Freight Analysis Framework 2.

Figure 6.2 Terminations of Freight Traffic in Chicago Region by Mode
Percentages Based on Annual Tons



Source: U.S. Department of Transportation, Freight Analysis Framework 2.

Geographically, the Chicago region receives and ships freight to all parts of the country. Figures 6.3 and 6.4 show the region's top trading partners, based on the value of goods.<sup>6</sup> Figure 6.3 is sorted by the value of goods terminating in the Chicago region in 2002. The remainder of Illinois was the top trading partner in 2002, and is projected to remain the

<sup>&</sup>lt;sup>6</sup> Excluded from Figures 6.3 and 6.4 are local shipments within the Chicago region, which are an order of magnitude larger than the values contained in the graphs.

top trading partner in the year 2035.<sup>7</sup> The Minneapolis region will become the second largest trading partner by 2035, due to a projected growth of nearly \$30 billion worth of precision instruments moving from the Minneapolis region to the Chicago region.<sup>8</sup> The next most important trading partners are the remainder of Indiana (excluding the northwest portion that is included in the Chicago region and Indianapolis), the Detroit region, and the remainder of Michigan.

Figure 6.4 is sorted by the value of goods originating in the Chicago region in 2002. The remainder of Illinois was the top trading partner in 2002, but is projected to fall to third place in 2035. The two top destinations for Chicago region goods in 2035 are Wisconsin (excluding Milwaukee) and Milwaukee. Strong growth also can be seen for goods destined for the remainder of Indiana, Los Angeles, Atlanta, and Pennsylvania. A very slight decline is forecast for traffic destined for the Detroit region. Growth in machinery, precision instruments, and miscellaneous consumer goods are behind the increased traffic to Wisconsin, as the Chicago region becomes even more of a staging area for Midwestern goods.

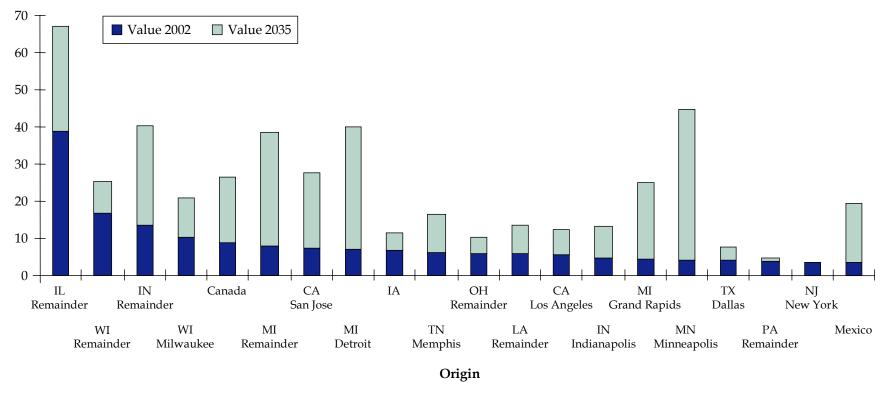
<sup>&</sup>lt;sup>7</sup> The "remainder of Illinois" is the portion of Illinois not included in the Chicago or St. Louis zones.

<sup>&</sup>lt;sup>8</sup> Based on the Freight Analysis Framework 2.

Figure 6.3 Value of Freight Traffic Terminating in the Chicago Region by Traffic Origin

Local Origins and Destinations Excluded

#### Value of Goods in Billions of Dollars

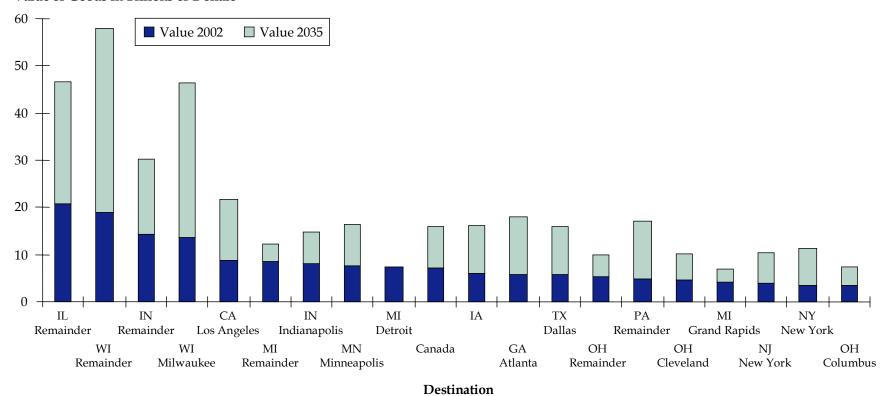


Source: U.S. Department of Transportation, Freight Analysis Framework 2.

Figure 6.4 Value of Freight Traffic Originating in the Chicago Region by Traffic Destination

Local Origins and Destinations Excluded

#### Value of Goods in Billions of Dollars

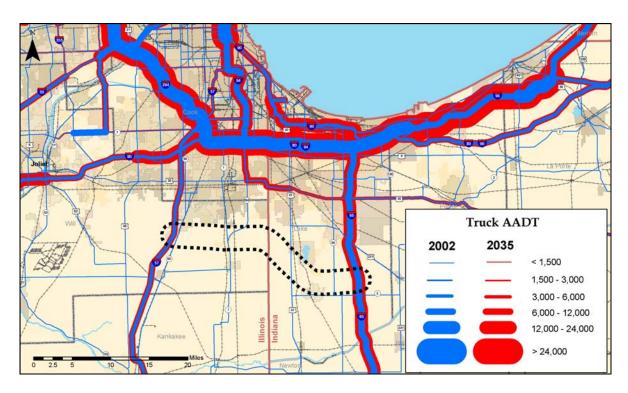


Source: U.S. Department of Transportation, Freight Analysis Framework 2.

#### Truck Growth and Roadway Congestion

Focusing just on the truck traffic and the impacts to roadway congestion, Figure 6.5 shows the projected increase in heavy trucks in the Chicago region. The blue lines depict truck activity in 2002, while the red lines are the forecasts for 2035. This map contains a mixture of originating, terminating, through, and local truck activity. There is heavy growth projected for most of the roads in the region, but the I-94, I-80/94, and I-294 corridors will see the greatest increase in number of trucks.

Figure 6.5 Growth in Truck Traffic in the Chicago Region 2002 to 2035



Source: U.S. Department of Transportation, Freight Analysis Framework 2.

Note: Includes originating, terminating, local, and through traffic.

Figure 6.6 shows the location of the major freight terminals in the Chicago region. The large majority of these facilities are located north of the Illiana Corridor, interspersed among the most congested roadways in the region.

Legend
Intermodal Terminals
Primary Mode

+ Air

Truck

Rail

Figure 6.6 Intermodal Facilities within a 50-Mile Radius of the Conceptual Illiana Corridor Alignment

Source: 2006 National Transportation Atlas Database, U.S. Bureau of Transportation Statistics.

#### ■ 6.1 Conclusion

The Chicago region is one of the primary freight hubs in the United States. This region was recognized in SAFETEA-LU with an earmark for the Chicago Region Environmental and Transportation Efficiency Study (CREATE) to begin improving the congested rail lines in and around Chicago. The Illiana Corridor would help relieve some of the truck congestion, serving as the "CREATE for trucks."

Depending upon the final alignment and future connections to the west in Illinois and to the east in Indiana, the Illiana Corridor could offer relief to the region through diversion of a significant portion of the long haul through truck traffic. An even larger benefit, though, would be the opportunity to open new intermodal centers along the Illiana Corridor, thereby moving some of the freight out of the congested areas near downtown Chicago. The Illiana Corridor would be an attractive location, with lower-cost land and good transportation access, for new development. By locating further from the downtown area, this corridor would help separate local Chicago-based traffic from the warehousing functions that serve the larger region. Not only would it help to reduce congestion on the "red" lines in Figure 4.2, but it also would be an economic spur for the region.

## 7.0 Safety Analysis

#### ■ 7.1 Safety Trends

Research on truck-related highway safety provided the following findings:

- A recent Federal Motor Carrier Safety Administration (FMCSA) study found the fatal crash rate for trucks nationwide (2.03 fatal crashes per 100 million vehicle miles traveled or MVMT) is higher than for vehicles as a whole (1.31 fatal crashes per 100 MVMT).<sup>9</sup>
- An ongoing research project analyzing Georgia state-administered roadways found that the fatal crash rate for trucks (1.48 fatal crashes per 100 MVMT) was nearly three times that for crashes as a whole (0.53 fatal crashes per 100 MVMT).<sup>10</sup>

#### ■ 7.2 Number of Crashes

Motor vehicle crash data and average daily traffic (ADT) data was provided by the states of Illinois (years 2001 to 2005) and Indiana (years 2003 to 2006). This data was analyzed to develop information on number of crashes and crash rates in the study area.

Table 7.1 shows historical data regarding the number of total crashes and fatal crashes on freeways, U.S. highways, and state routes in the Illinois portion of the study area (I-80, I-57, U.S. 30, IL 1, and IL 394 in Cook and Will counties). Also indicated is the number of crashes for which trucks were involved. This data is shown graphically in Figures 7.1 and 7.2.

<sup>&</sup>lt;sup>9</sup> Large Truck Crash Facts 2005, Tables 1, 3, 4, 5, 8, and 9; Federal Motor Carrier Safety Administration, February 2007.

<sup>&</sup>lt;sup>10</sup>Georgia Truck Only Lanes Draft Report, Section 5.0: Crash Analysis; Cambridge Systematics, March 2007.

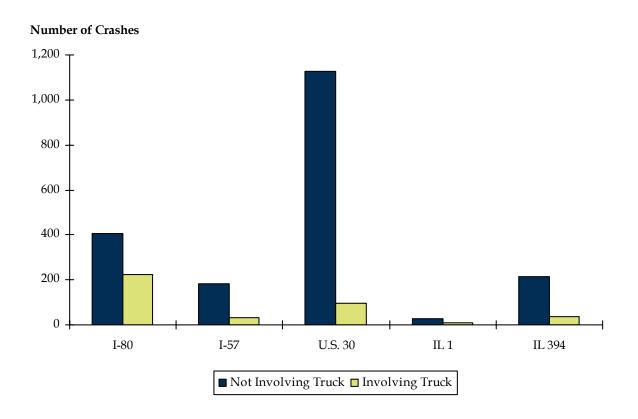
Table 7.1. Motor Vehicle Crashes in Illinois Portion of Study Area<sup>a</sup>

		A	All Crashes		Fatal Crashes	
Facility	Year	Total	Involving Truck	Total	Involving Truck	
I-80	2001	543	176	2	1	
	2002	608	225	4	0	
	2003	627	221	3	0	
	2004	656	229	0	0	
	2005	708	265	4	1	
	Average	628.4	223.2	2.6	0.4	
I-57	2001	206	26	4	0	
	2002	205	29	4	1	
	2003	232	36	6	0	
	2004	209	31	0	0	
	2005	217	37	3	1	
	Average	213.8	31.8	3.4	0.4	
U.S. 30	2001	1,228	97	6	1	
	2002	1,168	80	3	1	
	2003	1,277	84	6	0	
	2004	1,140	90	5	1	
	2005	1,286	120	9	2	
	Average	1,219.8	94.2	5.8	1.0	
IL 1	2001	47	14	1	1	
	2002	35	11	0	0	
	2003	35	8	0	0	
	2004	40	11	0	0	
	2005	33	9	1	1	
	Average	38.0	10.6	0.4	0.4	
IL 394	2001	242	27	2	1	
	2002	250	28	3	1	
	2003	292	34	5	2	
	2004	233	27	6	0	
	2005	235	61	0	0	
	Average	250.4	35.4	3.2	0.8	
Total	2001	2,266	340	15	4	
	2002	2,266	373	14	3	
	2003	2,463	383	20	2	
	2004	2,278	388	11	1	
	2005	2,479	492	17	5	
	Average	2,350.4	395.2	15.4	3.0	

Notes: "All Crashes" includes reported property damage only crashes, injury crashes, and fatal crashes.

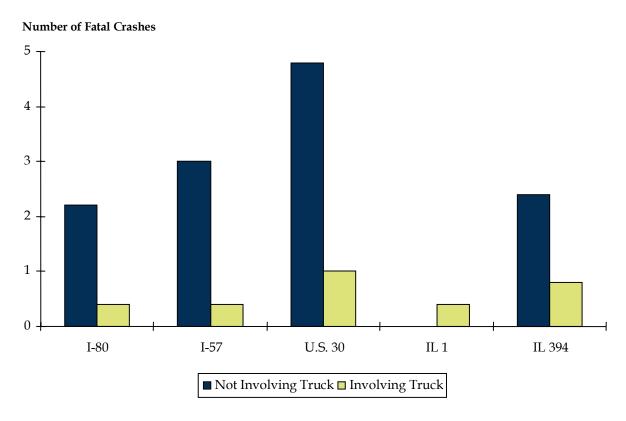
<sup>&</sup>lt;sup>a</sup> Cook and Will counties

Figure 7.1 Average Annual Total Crashes in Illinois Portion of Study Area 2001-2005



Source: Illinois DOT (motor vehicle crash data, years 2001-2005).

Figure 7.2 Average Annual Fatal Crashes in Illinois Portion of Study Area 2003-2005



Source: Illinois DOT (motor vehicle crash data, years 2001-2005).

In total, trucks were involved in 16.8 percent of all crashes and 19.5 percent of fatal crashes in the Illinois portion of the study area.

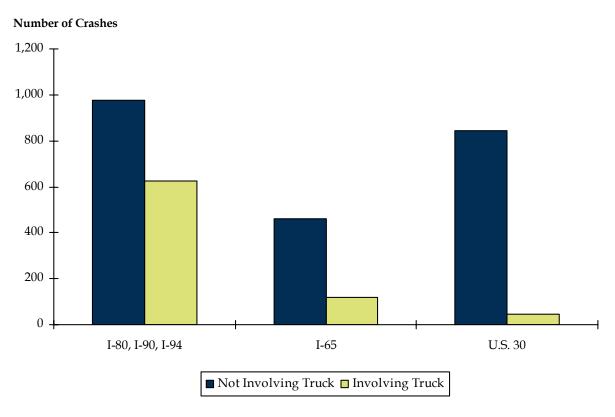
Table 7.2 shows historical data regarding the number of total crashes and fatal crashes on freeways and U.S. highways in the Indiana portion of the study area (I-80, I-90, I-94, I-65, and U.S. 30 in Lake County), and the number in which trucks were involved. This data is displayed graphically in Figures 7.3 and 7.4.

Table 7.2 Motor Vehicle Crashes in Indiana Portion of Study Area<sup>a</sup>

		All Crashes		<b>Fatal Crashes</b>	
Facility	Year	Total	Involving Truck	Total	Involving Truck
I-80, I-90, I-94	2003	1,671	631	6	4
100,170,171	2004	1,835	770	7	5
	2005	1,290	468	6	2
	Average	1598.7	623.0	6.3	3.7
I-65	2003	582	142	1	1
	2004	634	114	6	5
	2005	515	95	1	1
	Average	577.0	117.0	2.7	2.3
U.S. 30	2003	1,026	49	1	0
	2004	996	52	2	0
	2005	640	35	0	0
	Average	887.3	45.3	1.0	0.0
Total	2003	3,279	822	8	5
	2004	3,465	936	15	10
	2005	2,445	598	7	3
	Average	3063.0	785.3	10.0	6.0

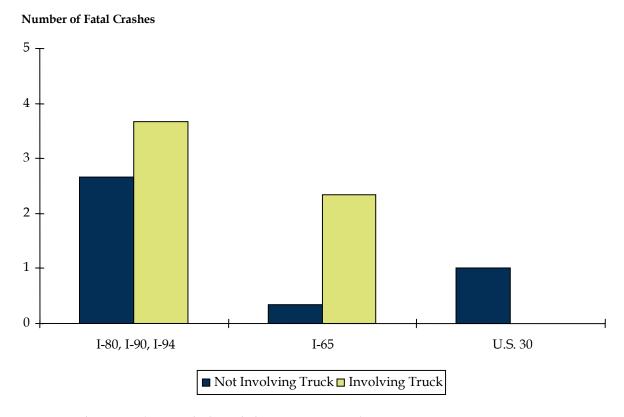
<sup>&</sup>lt;sup>a</sup> Lake County.

**Figure 7.3** Average Annual Total Crashes in Indiana Portion of Study Area 2003-2005



Source: Indiana DOT (motor vehicle crash data, years 2003-2005).

Figure 7.4 Average Annual Fatal Crashes in Indiana Portion of Study Area 2003-2005



Source: Indiana DOT (motor vehicle crash data, years 2003-2005).

In total, trucks were involved in 24.6 percent of all crashes and 52.9 percent of fatal crashes in the Indiana portion of the study area.

Table 7.3 compares the percentage of fatal crashes involving trucks on freeways, U.S. highways, and state routes in the study area to state and national averages.<sup>11</sup>

<sup>&</sup>lt;sup>11</sup>National and state averages are from *Fatal Accident Reporting System (FARS) Data, Tables 1 and 10;* Federal Motor Carrier Safety Administration (FMCSA), September 2006.

Table 7.3 Comparison of Percentages of Fatal Crashes Involving Trucks on Selected Study Area Roadways

<b>.</b>		Percentage of Fatal Crashes that Involved Large Trucks			
State	Year	In Study Area	State Average	National Average	
Illinois	2001	26.7%	13.5%	11.8%	
	2002	21.4%	11.2%	11.0%	
	2003	10.0%	12.4%	11.3%	
	2004	9.1%	11.4%	11.6%	
	2005	29.4%	13.8%	11.6%	
	Average	19.5%	12.4%	11.4%	
Indiana	2003	62.5%	18.9%	11.3%	
	2004	66.7%	16.2%	11.6%	
	2005	42.9%	14.6%	11.6%	
	Average	60.0%	16.6%	11.5%	

Note: 2006 data for Indiana is omitted from the analysis as FARS year 2006 data is not yet available.

The percentages of fatal crashes in the study area that involved large trucks is higher in both Illinois (based on five-year average from 2001 to 2005) and Indiana (based on three-year average from 2003 to 2005) than the state and national averages. This is particularly true for Indiana.

#### ■ 7.3 Crash Rates

Based on estimates developed for vehicle miles traveled (VMT), Table 7.4 shows the crash rates on selected roadways in the Illinois portion of the study area. The numbers shown indicate the crashes in that year per 100 million vehicle miles traveled (MVMT).

The crash rates for U.S. highways and state routes were significantly higher than for freeways within the Illinois portion of the study area. This is true for both the total crash rate and the fatal crash rate.

Table 7.5 shows the crash rates in the Indiana portion of the study area.

Table 7.4 Crash Rates in Illinois Portion of the Study Area

		Per 100 Million Vehicle Miles Traveled		
Facility	Year	Total Crash Rate	Fatal Crash Rate	
Eventoscrivores Illinois	2001	48.51	0.39	
Expressways, Illinois				
(I-80, I-57)	2002	46.86	0.46	
	2003	44.60	0.47	
	2004	40.86	0.00	
	2005	40.07	0.30	
	Average	43.72	0.31	
U.S. and SR, Illinois	2001	241.98	1.44	
(U.S. 30, IL 1, IL 394)	2002	234.14	0.97	
	2003	261.15	1.79	
	2004	232.46	1.81	
	2005	258.35	1.66	
	Average	245.55	1.53	
All Facilities, Illinois	2001	104.38	0.69	
	2002	96.19	0.59	
	2003	96.96	0.79	
	2004	83.60	0.40	
	2005	85.20	0.58	
	Average	92.52	0.61	

Table 7.5 Crash Rates in Indiana Portion of the Study Area

	Year	Per 100 Million Vehicle Miles Traveled		
Facility		<b>Total Crash Rate</b>	Fatal Crash Rate	
Expressways, Indiana	2003	157.12	0.49	
(I-80, I-90, I-94, I-65)	2004	169.98	0.90	
,	2005	123.66	0.48	
	Average	150.18	0.62	
U.S. and SR, Indiana	2003	347.45	0.34	
(U.S. 30)	2004	328.10	0.66	
	2005	211.03	0.00	
	Average	295.08	0.33	
All Facilities, Indiana	2003	189.62	0.46	
	2004	197.32	0.85	
	2005	138.69	0.40	
	Average	175.09	0.57	

While the total crash rate for U.S. 30 was higher than for expressways within the Indiana portion of the study area, the fatal crash rate was lower.

# 8.0 Finance Plan, Project Delivery, and Private Sector Participation

The cost of the Illiana Expressway has been estimated at \$323 million (2006 dollars), for a four-lane rural expressway, or approximately \$600 million (2006 dollars) when four truck-only lanes are added to the four general purpose lanes (See Figures 2.2 and 2.3). Public funding is not likely to be available to support the construction and implementation of this project for a number of years. The Indiana and Illinois departments of transportation (DOT) are willing to consider alternative funding and financing strategies to accelerate the delivery of such an important corridor for the region. This section explores some of the financing options that could be considered for the Illiana Corridor and the potential combination of financing strategies that the states of Indiana and Illinois could pursue to implement the project.

Potential financial implementation strategies include a range of approaches from publicly financed to privately financed. While these are not intended to preclude other options or variations that could be explored as the project moves into other phases of project development, three potential funding/financing alternatives include the following.

#### ■ 8.1 Publicly Financed Freeways in Both States

If publicly financed, a segment of the Illiana Corridor would be added to each state's Transportation Improvement Program based on funding availability. The project currently is not funded in the Indiana DOT's Major Moves program, which outlines investment priorities through 2015. Likewise, the project is not funded in the current Illinois DOT Highway Improvement Program through 2013.

Each state can consider design-build procurement to accelerate project implementation. A design-build contract can add efficiencies and reduce implementation time. Design-build has been used in Indiana for a number of projects. In Illinois, enabling legislation for design-build has been proposed in previous legislative sessions, but has not been enacted.<sup>12</sup>

<sup>&</sup>lt;sup>12</sup>94<sup>th</sup> Session of the Illinois General Assembly. House Bill 1067 "Design-Build Procurement Act." Bill expired at the end of the session in January 2007.

Federal innovative financing tools, such as State Infrastructure Banks (SIB) and Grant Anticipation Revenue Vehicles (GARVEE), could accelerate the availability of funding somewhat. Though SIBs, such as those which are in place in Indiana, states can issue loans to project sponsors by dedicating Federal and state funds to create a revolving loan fund. However, a dedicated revenue source will be required to repay the loan. As SAFETEA-LU provides authority for the creation of multistate SIBs, this innovative approach could be explored for the Illiana Corridor project. GARVEEs allow states to issue bonds backed with future Federal revenues. However, the use of GARVEEs can affect the implementation of other projects by committing future Federal funds.

# ■ 8.2 Illinois Tollway Extension in Illinois, Publicly Financed Toll Road in Indiana

There are precedents and institutional arrangements in each state that suggest the potential viability of a strategy that combines the 50-year operating and financing experience of the Illinois State Toll Highway Authority (ISTHA) with Indiana's similarly long experience operating the Indiana Toll Road.

The Illinois portion of the Illiana Corridor could be implemented and operated by the ISTHA as an extension to the North-South Tollway (I-355). Although the project is not included in the agency's long-term plan, ISTHA may consider the corridor as part of its system in the future, either as a traditional tollway or as a truck-only facility. The I-355 Extension to I-80 also provides some precedent for ISTHA assuming a role as an implementing agency after a project has been planned by others (the Illinois DOT in this case).

If the Illinois portion of the Illiana Expressway is built by ISHTA, the agency could issue toll revenue bonds to finance construction and support operations and maintenance costs of the highway. The feasibility of this approach, which would depend on the ability of the project to support its capital and operating costs through toll revenues, will be determined in the next phase of study. One consideration will be the need, if any, for cross-subsidization of toll revenues from other portions of the Illinois Tollway system to support the Illiana Corridor.

The Indiana Finance Authority (IFA) is a consolidated agency with the authority to issue revenue bonds for the construction of highways and other facilities throughout Indiana. The IFA owns the Indiana Toll Road and serves as the lessor to the Cintra-Maquarie consortium that recently entered into a long-term operating lease. The IFA could issue toll revenue bonds for the construction of the Illiana Corridor.

Under this funding/financing strategy, coordination will be required between ISHTA and the concessionaire selected by Indiana to ensure interoperability and consistency through the facility (e.g., toll collection system and toll structure, among others). The E-ZPASS electronic toll collection system being implemented by the private concessionaire on the

Indiana Toll Road is expected to offer interoperability with the I-PASS system used on the Illinois Tollway.

#### ■ 8.3 P3 Toll Road in Both States

The Illiana Corridor project has been identified as having significant potential for delivery through P3 arrangements, such as Design-Build-Finance-Operate contracts. Securing private sector participation on this project could leverage public funding and accelerate implementation, allowing the region to benefit from the economic growth, reduced congestion, and improved intermodal connections that are expected to result from the construction of this important corridor.

The Indiana DOT is actively seeking opportunities to build on its recent success in leasing the Indiana Toll Road to private investors by encouraging private equity participation in transportation projects around the State. The Illiana Corridor represents one of the best opportunities for innovative finance in Indiana. Legislation directing the Indiana DOT to study the feasibility of the Illiana Corridor between I-65 and I-57, including an assessment of potential funding options, has been passed by the Indiana Legislature and signed into law by the Governor.<sup>13</sup> If the study identifies an opportunity for private participation, legislative approval of the partnership for the project will be required.

Illinois currently has no enabling legislation authorizing the State or the Illinois DOT to solicit private sector participation in transportation investments. However, the City of Chicago already has experience with long-term concessions through its lease of the Chicago Skyway, and the State could draw from that experience to allow P3 in general or to develop a specific P3 agreement for the Illiana Corridor. The "Public Private Partnerships for Transportation Act" has been introduced in the current session of the Illinois General Assembly. The act would give the Illinois DOT and ISTHA the authority to enter into public-private agreements for the development, operation, and financing of transportation facilities, such as the Illiana Corridor.

Under either toll scenario, design-build also could help to accelerate project implementation. Several financing tools that were created by the Federal government to help states with the implementation of major transportation investments also could be applied. These tools could help leverage state revenue sources and encourage private sector participation:

• TIFIA - The TIFIA program was created in 1998 to support major transportation investments of national and regional significance with loans, loan guarantees, or

<sup>&</sup>lt;sup>13</sup>2007 Regular Session of the Indiana Legislature. Senate Bill 105 on various transportation matters.

<sup>&</sup>lt;sup>14</sup>95<sup>th</sup> Session of the Illinois General Assembly. Senate Bill 378 "Public-Private Partnerships for Transportation Act."

standby lines of credit. The Illiana Corridor meets the eligibility criteria to receive credit assistance under the TIFIA program. The anticipated cost of the Illiana Corridor project is well above the TIFIA minimum of \$50 million.

- Private Activity Bonds (PAB) SAFETEA-LU included an amendment to the IRS code to allow the issuance of tax-exempt private activity bonds for highway and freight transfer facilities. Eligible projects include any surface transportation project that receives Federal funding assistance under Title 23 USC. If the Illiana Corridor is delivered through a P3 arrangement, the project sponsor can request PABs for project implementation.
- **SEP-15** This program allows states to propose new approaches to project delivery that currently are prohibited under Title 23. The Secretary approves the exemptions on a case-by-case basis. States can propose exemptions to Title 23 requirements in four areas: contracting; right-of-way acquisition; project finance; and compliance with NEPA or other environmental requirements. For the Illiana Corridor project, the Indiana DOT and/or the Illinois DOT will explore and decide the areas in which an application of SEP-15 would benefit in accelerating project delivery (e.g., environmental process streamlining), facilitating P3, and providing finance options.

# 9.0 Exceptional Environmental Stewardship

Executive Order 13274 was signed by President Bush on September 18, 2002 for the purpose of streamlining the environmental review process for transportation infrastructure projects. According to this order, appropriate actions will be taken "to promote environmental stewardship in the nation's transportation system and expedite environmental reviews of high-priority transportation projects." Accordingly, the Secretary of Transportation has the authority to designate the high-priority projects that are eligible for "expedited reviews," with the list being updated periodically, as appropriate. An interagency Transportation Infrastructure Streamlining Task Force (Task Force) has been created within the department of transportation to assist agencies with the expedited process and ensure that the streamlining occurs without sacrificing safety, public health, and environmental protection. In addition, the Task Force is charged with reviewing regularly projects on the priority list, as well as ensuring that the streamlining process is functioning effectively.

The priority projects that are described in the order are selected by the U.S. Department of Transportation based on nominations from state, regional and local governmental agencies, and authorities. Key criteria that are used in the selection process include:

- National or regional significance;
- Local support; and
- Delays that could result (or have resulted) from untimely review processes.

To date, 19 projects have been selected for the expedited process, 11 of which have had the process completed.

By virtue of being selected as a finalist in the Corridors of the Future Program, the Illiana Corridor would be recognized as a Nationally Significant Project, thus enabling it to rank favorably among competing projects on the "high-priority list" for eligibility to participate in the streamlined environmental review and permitting process.

The Illiana Corridor project also will have the ability to take advantage of the streamlining processes that have evolved since the enactment of SAFETEA-LU. Included in these processes is the concept of Planning and Environmental Linkages (PEL). PEL actually allows integration of the planning and environmental phases of project development, which will inherently result in expedited project delivery. In order to achieve the full benefits of linking these two phases of project development, it is essential that public and agency involvement and coordination occur during the early planning stages so that the products

of these stages incorporate and benefit from their feedback. The overlapping of phases will enable the following benefits to accrue:

- Resource agency involvement early in the project development process will enable initial decision-making to incorporate their input;
- No "hand-off" or lag time between phases;
- Sharing of tools;
- Enhanced coordination;
- Avoidance of unnecessary redundancies of tasks;
- Seamless public outreach process; and
- Linkage between statewide and metropolitan planning and the NEPA process.

In conjunction with the accelerated project development process which would result from environmental streamlining, such as using the INDOT EA/Corridor Study Process<sup>15</sup>, corridor preservation could commence, thus facilitating the early acquisition of right-of-way for the proposed Illiana Corridor. It is essential that this corridor protection begin as early as allowed by legislative policy in order to avoid any further threats to right-of-way that would push the corridor further south, thus diminishing its ability to provide relief to the existing facilities. In the State of Illinois, corridor protection for expected future transportation needs is permitted under Statute 605 ILCS 5/4-510. This statute allows the Illinois Department of Transportation to purchase right-of-way that has been previously identified for transportation improvements as it becomes threatened by new development. While the State of Indiana currently does not have similar corridor protection authority, this is an area that will be explored during future phases of project development.

In addition to the project streamlining opportunities described above, the technique of context-sensitive solutions (CSS) will help build consensus among stakeholders throughout the project through teamwork, public interaction, and coordination with resource agencies. This process will result in timesavings, while producing an end product that addresses community concerns and is consistent with the natural and human environment. Context-sensitive solutions is essentially an environmentally responsible approach to the transportation project development process which will help promote a design that fits into the "context" of its surroundings – environmentally, socially, economically, and aesthetically.

<sup>&</sup>lt;sup>15</sup> This streamlined process, developed by FHWA and INDOT, combines the Planning and NEPA phases of the project development process.

## 10.0 Proposed Project Timeline

The realization of the Illiana Corridor will involve a sequence of activities, including project development, corridor protection, right-of-way acquisition, and construction. The current status, timeframe required for completion of these activities, and strategies for accelerating the implementation schedule are described in this section.

#### ■ 10.1 Project Development

Through the Bi-state Agreement between Illinois and Indiana, the general scope of a feasibility study of the Illiana Corridor has been developed. This process has reached another milestone in Indiana Governor Daniels' recent signing of legislation which directs the Indiana DOT to perform a needs assessment for the Illiana Corridor. The study will provide a description of the need for an Illiana Expressway, projections for right-of-way acquisition costs, expected use of the proposed expressway and any toll revenues, expected construction costs, expected operating and maintenance costs, funding options, the project's ability to relieve traffic congestion, and economic impacts. By following the INDOT EA/Corridor Study Process, this phase of project development will result in a reasonable range of alternatives that may proceed directly into an EIS. The study is to be completed by July 1, 2009.<sup>16</sup>

Following development of the feasibility study, an Environmental Impact Statement (EIS) will be completed. This process, which typically takes five years for such projects, will conclude with a record of decision (ROD). Acceleration of this timeframe is possible for the Illiana Corridor because some of the EIS activities are to be conducted in the feasibility study. Accordingly, a ROD could be achieved by July 1, 2012, two years earlier than with the traditional approach which would result in a ROD by mid-2014.

Final design and engineering will begin on issuance of the ROD. On similar projects, based on a traditional project delivery approach this process would take another four years, combined with right-of-way acquisition, after which construction would commence, in approximately mid-2018.

Based on potential alternative delivery methods that could be implemented for the Illiana Corridor, the design and right-of-way acquisition phases could be blended into the construction phase of the project, resulting in additional time savings. Combined with the

<sup>&</sup>lt;sup>16</sup>2007 Regular Session of the Indiana Legislature. Senate Bill 105 on various transportation matters.

time savings that would be achieved by following the INDOT EA/Corridor Study Process, this blended phase could commence upon issuance of the ROD, as early as mid-2012.

#### ■ 10.2 Corridor Protection

After identification of a preferred alignment, Illinois will move to prevent further development of parcels within the expected right-of-way of the Illiana Corridor under its Corridor Protection Statute. This statute requires property owners to notify the DOT of any improvements to land or structures and give the DOT an opportunity to purchase or acquire the land.

Although Indiana does have Corridor Preservation legislation, it has not been frequently applied. This does however represent an opportunity for technology transfer that could be encouraged by participation in the Corridors of the Future Program.

#### ■ 10.3 Right-of-Way Acquisition

On issuance of the ROD, right-of-way acquisition will begin in Indiana. At this time, acquisition of any remaining properties within the footprint of the Illiana Corridor will begin in Illinois as well.

#### ■ 10.4 Construction

The Indiana DOT has estimated that construction will require approximately three years under a conventional design-bid-build construction method. Combined with design and engineering activities, completion of the Illiana Corridor following the ROD would take approximately seven years. If the Illiana Corridor were developed as a publicly funded toll road using traditional procurement approaches, the highway could open to traffic in mid-2021. As noted above, if the highway were developed as a freeway, waiting for public funding could delay the project until sometime in the next decade.

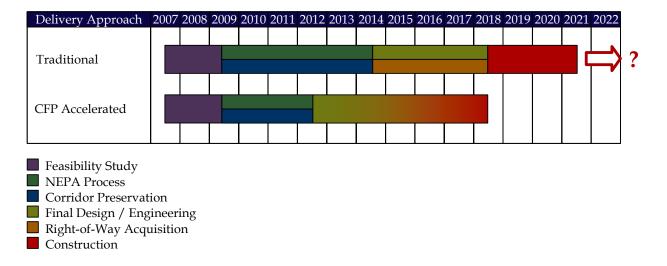
Corridors of the Future designation could accelerate delivery of the Illiana Corridor by streamlining environmental reviews, involving the construction team earlier in the process through design-build and potentially a SEP-15 Early Development Agreement. Based on average national experience, design-build could shorten the overall timeframe for

design and construction by one year or more.<sup>17</sup> Design-build is not yet possible under Illinois statutes, although momentum has been building for enabling legislation to allow the practice. This represents another opportunity for technology transfer that could be encouraged by participation in the Corridors of the Future Program.

#### **■** 10.5 Summary

Figure 10.1 shows the overall project schedule under the traditional approach and with the acceleration that Corridor of the Future designation would encourage. The traditional approach assumes that some resolution of the local funding problem would be realized, such as implementation as a publicly funded toll road in both states, allowing the project to open to traffic in mid-2021. With the benefit of expedited environmental review and an alternative delivery, the Illiana Corridor project could be realized as soon as 2018.

Figure 10.1 Implementation Timeframe



<sup>&</sup>lt;sup>17</sup>Federal Highway Administration. "Design-Build Effectiveness Study." January 2006. Available at http://www.fhwa.dot.gov/reports/designbuild/designbuild.htm.

# 11.0 Opportunities Resulting from Corridors of the Future Designation

Designation of the Illiana Expressway as a Corridor of the Future would improve access to many of the programs that encourage faster delivery of congestion-relief projects. These programs include:

- **Streamlined Environmental Review -** By expediting the environmental review of the project, it will be possible to begin the process of selecting a design-build project implementation team more quickly.
- **SEP-15 Innovations** Would enable the use of innovative approaches to project delivery in order to accelerate the phases of project development.
- TIFIA Credit Assistance By making the project more competitive for TIFIA loans, guarantees, or other credit assistance, TIFIA could supplement financing for up to onethird of the project cost.
- **Private Activity Bonds** By making the project more competitive for the limited amount of national funding available through PABs, potential P3 partners could realize lower costs of capital and reduce state funding requirements.
- Accelerated Construction Start Considering inflation in the costs of construction, materials, and labor, an expedited construction schedule will likely result in the realization of greater cost savings.
- Other Benefits Through designation as a Corridor of the Future, the project also would benefit from the increased availability of innovative ideas and knowledge of best practices from U.S. DOT staff regarding planning, environmental impact assessment and mitigation, public-private partnerships, project delivery and finance strategies, construction, safety, operations, and asset management.

### 12.0 A Clear Path for Success

Through the preceding pages of this Corridors of the Future Phase 2 Application, we have demonstrated "A Clear Path for Success" that will result from the designation of the Illiana Corridor as a Corridor of the Future, resulting in the commencement of project development activities and subsequent implementation of this project. The following bullet points emphasize why development of the Illiana Corridor is the most appropriate alternative for addressing the mobility needs of the study area.

- The Illiana Corridor is needed in order to alleviate congestion and delay on existing routes within the bi-state region from both the personal travel and freight mobility perspectives. The Borman Expressway (I-80/I-94) currently is carrying over 150,000 vehicles per day. Recent improvements on the Borman have maximized the (lateral) expansion of this roadway. Alternative options for adding capacity, such as vertical expansion by means of an elevated roadway, would be extremely costly, in terms of both construction and maintenance costs. Ongoing widening on I-90 (Indiana Toll Road), when completed, also will maximize the capacity potential of this roadway.
- Development of the Illiana Corridor will help alleviate the high percentage of heavy truck traffic on competing routes through the study area, including I-80/I-94, I-90, and U.S. 30, by providing an alternate route for these vehicles to bypass the urban area. With traffic projections showing a potential heavy truck percentage on the Illiana of 20 percent, a viable option for this facility would be the inclusion of truck-only lanes, in addition to the general purpose lanes. This option would provide an incentive for diversion of heavy truck traffic from existing routes onto the new roadway. By separating the heavy truck traffic from the other vehicles, enhanced safety will result along all study area roadways.
- As indicated in the Economic Benefits section of this application, the conceptual Illiana Corridor is heavily represented by freight-intensive industries. At its proposed location, the Corridor will provide a connection to existing and proposed intermodal facilities within the region, thus providing enhanced opportunities for commerce and economic development at both the regional and national levels. In addition, the proposed facility would provide both multimodal and intermodal connections for the proposed South Suburban Airport.
- There is a strong need to begin preserving the right-of-way for the proposed Illiana Corridor, before it becomes further threatened. Potential alignments further north already have seen significant development to the point where a transportation corridor through these areas would be extremely disruptive. If the alignment is pushed further south, it will become less attractive as an alternative route, and will thus provide less relief for the competing east-west roadways.

- The Illiana Corridor will provide a much needed bi-state linkage to serve the needs of traffic destined to, from, within, and through the study area. In its proposed location, the Illiana Corridor lends itself to future linkages to I-55, I-80, I-355, and the proposed Prairie Parkway to the west, and to I-80, I-90, and I-94 to the east. By limiting the locations of interchanges to major intersecting roadways, sprawl-induced land use patterns would be discouraged.
- Total U.S. freight and passenger benefits of the Illiana Corridor in 2030 are estimated
  to be \$859 million with substantial benefit to national goods movement. Regional economic impacts due to reduced transportation and logistics costs are projected to
  include up to 2800 jobs and over \$1.8 billion in economic activity for the Chicago and
  Northwestern Indiana metropolitan areas over the next 30 years.
- Transportation System Management (TSM), Travel Demand Management (TDM) and Intelligent Transportation System (ITS) strategies should be integrated into the development of the Illiana Corridor. These strategies may include a combination of the following measures to alleviate congestion and enhance the flow of traffic through the Illiana Corridor, as well as alternative routes:
  - Variable Message Signs;
  - Surveillance and Detection;
  - Ramp Metering;
  - Mainline Automated Clearance Systems (MACS) for Electronic Truck Permitting;
  - Electronic Toll Collection/Open Road Tolling;
  - Highway Advisory Radio;
  - Incident Management
  - Weigh-in-Motion; and
  - Road Weather Information Systems (RWIS).

#### Respectfully Submitted:

Commissioner Karl B. Browning Indiana Department of Transportation

Acting Secretary Milton R. Sees Illinois Department of Transportation

Executive Director John A. Swanson

Northwestern Indiana Regional Planning Commission

Executive Director Randall S. Blankenhorn Chicago Metropolitan Agency for Planning